

Comments on Dr. Hart's Paper.

By J. LEON WILLIAMS, London, England.

I have read the paper presented before the Central Dental Association of Northern New Jersey, by A. C. Hart, Ph. B., D. D. S., M. D., and the discussion thereon, and also the summing up of his views as given in the International Dental Journal a few months ago, and I cannot think that any extended reply from me is called for. I have received quite a number of letters from well known teachers in the dental profession in America, England and on the continent, concerning this paper by Hart, and they all express surprise and regret that there should be a man in our profession posing as a teacher who could concoct such a mass of nonsense, and they express greater surprise and regret that a body of men could be got together to listen to such stuff.

As the months and years pass, one finds opportunity enough, in the matter of our dental journals, for criticism, but in the presence of such a bewildering mass of abysmal ignorance as is shown in this paper by A. C. Hart, Ph. B., D. D. S., M. D., legitimate criticism feels quite hopeless and helpless and, so to say, out of the running. How is one to get in touch with these maunderings of Hart or in any way to take him au scrieux. If one were to attempt to deal with the matter in detail, one would have to send dignity into an adjoining room and close the door. No, my gorge rises and I must draw the line at A. C. Hart, Ph. B., D. D. S., M. D. I will ask those who are interested in these matters to accept the following general statements:

In the language of a famous composer, one may say of Hart's work that "whatever in it seems new is not true, and whatever in it is true is not new." He has not done or suggested anything of value in the way of preventing decay that others have not been doing for years. All efforts in this direction are to be cordially commended, but nothing could more strongly tend to discount such efforts than the extremely ludicrous theories on which Hart bases his work. Such expressions as "disease is

a natural force," or "bacteria will not grow on tissue covered with any of the essential oils * * * * because the oil protects the water or has a greater affinity for the water than have the bacteria." "Cause, I take then, to be a force manifesting itself as influence." "Cause is not influence, but influence is one of the manifestations of power," may perhaps become immortal because they top the heights of foolishness, but certainly not for any other reason.

Hart's attempt to put Miller, Andrews and Heitzman in a class, and then set them over against Dr. Black and myself might be amusing if it were not so very silly. Dr. Andrews has always opposed Heitzman's views, Heitzman bitterly opposed Miller as long as he lived, while Drs. Miller, Black and myself are in substantial agreement on all points of bacteriology. Dr. Miller, who has been spending a few days in London, called on me this morning, and as we parted I asked him if he wished to be quoted as saying anything about Hart's use of his name. He replied that while he had always avoided replying to all misrepresentations of his position and teachings, I might say in this connection that he thought Hart most unfair in quoting from his earlier work when he ought to know that many things had come out during the past twelve or fifteen years which have made necessary some modifications of earlier opinions. He further added that he hoped no one in America would suppose he accepted the absurdities of Hart's teaching.

I shall make but one or two specific references to Hart's article, but these so perfectly illustrate his method, that I think further comment will be unnecessary.

How Dr. Hart Misunderstands. On page 83 of the February issue of Items of Interest, Dr. Hart says: "Why Dr. Williams should bring before us in argument a photograph like Fig. 47, page 282, Cosmos, April, 1897, that is certainly

not in focus, shows evidence of being jarred, and is very poor in comparison with Fig. 48, I cannot understand."

No, he "cannot understand," evidently, that is just his whole difficulty. For if he could "understand" the simplest and most straightforward language, he would perceive what a biting sarcasm on himself the above quotation from his own words contain. Now let the reader turn to the Cosmos for April, 1897, and, beginning near the bottom of page 280, read my explanation of the Fig. 47 to which Hart has referred. I say: "Fig. 47 is a photograph of enamel from the tooth of a South American rodent (Uromys macropus). I selected the tooth of this little animal for showing this particular feature, because the enamel rods are very distinct and clearly defined from the inter-rod substance. So far as I am aware, the appearance of a fiber with thorn-like projections between the enamel

rods has never before been so strikingly shown, certainly not in a photograph."

"It certainly does look like a convincing bit of argument in their favor (referring to the theory of Heitzman and Bödecker regarding a beaded enamel fiber between the enamel rods).

"But we really have here," I go on to say, "only the outward form and semblance of a truth, and so we must, perforce, consign it to that great limbo which has swallowed up so many human delusions. It is a mere appearance, intentionally produced in this instance by manipulating the rays of light which illuminated the section at the time of photographing it."

I then go on to explain how, by throwing the sub-stage condenser slightly out of focus, I have produced this appearance of a fiber, and that I have done this to illustrate how careless or incompetent observers may think they "discover" things which, as I put it, "Nature is quite innocent of."

On the opposite page I show another photograph of the same spot in the section, with all of the optical parts of the microscope central and in critical focus, in which all trace of this artificially produced fiber has disappeared. Now, I wonder if, when Dr. Hart reads the above, it will dawn upon his mind why Fig. 47 in my paper was introduced? I wonder if he will "understand" why it is "not in focus?" I fear not, because I must suppose that he read the original explanation which is clear and more in detail than the one given here, and if he could not understand that what hope that he will grasp this? And this very fairly represents his complete lack of apprehension of the fundamental principles of the problems he undertakes to discuss.

Dr. Hart's performance in this connection reminds me of a story I heard a short time ago. A certain ambitious young preacher had received a "call" to minister to the spiritual needs of a new congregation. He had heard that certain minds in his new audience were being poisoned with atheistical doubts, and so one of his first efforts was aimed at the removal of these doubts. Being a conscientious man and desiring to do his work thoroughly, he devoted a large part of his sermon to presenting the claims of atheism in the strongest possible manner. He then rapidly and briefly replied to these claims and effectively demolished them, as he thought. A day or two after, meeting a member of his congregation who had the reputation of being a shrewd old chap, he inquired what he thought of his last sermon. "Well," said the old man, frankly, "the sermon was no doubt very fine and larned, but I'm thinkin' you'll never convince our people that there isn't a God."

Action of Acid on Enamel.

I have been asked to make some answer to Dr. Hart's charge that I have said that "acids dissolve out the organic matter" (in enamel) "before they do the lime salts." This statement of Hart's

contains a sort of "double barrel" misrepresentation. Perhaps the best way of answering it would be to call on Dr. Hart to point out page and line where I have said that enamel, except in very rare cases, contains organic matter, and also where I have said that the acids of decay act first or most rapidly on the organic matter in those rare and exceptional cases. These assumptions on Hart's part grow out of a profound ignorance of the whole subject. He completely fails to grasp the significance of anything that has been said; he manufactures conclusions that are peculiarly his own, proceeds to foist them upon others and then shouts loudly for an explanation.

But suppose, just for the sake of showing the complete absurdity of Hart's position in the fewest possible words, that there always is organic matter in enamel and most near where it joins the dentine. As a consequence of this, there would be less calcific material to be destroyed by the acids. When the acid has dissolved the calcific material, what happens to the slight traces of organic matter?

Hart accepts Dr. Miller's statements as good gospel. Very well, we will quote one of the passages from Dr. Miller's article in the *Cosmos* for January, 1893, which Hart has used in his recent paper, and we shall find in this quotation a complete answer to the above question. See ITEMS OF INTEREST for February, page 81, where the quotation reads as follows:

"Enamel contains about three and one-half per cent of organic matter, therefore the very delicate (organic) network, which remains after decalcification, falls to pieces of itself or is torn away by the action of mastication."

And thus, from his own quotation, out of the writings of his own good prophet, is Hart put to confusion and shame. The ingenuity of Gilbert's Mikado never devised punishment more fitting to crime than this. But why pursue the subject further? This "thing of shreds and patches" written under the name of A. C. Hart, Ph. B., D. D. S., M. D., is not worth a moment's notice from those qualified to judge of such matters, and I have written this reply to prevent those in our profession, who have not had the opportunity of informing themselves critically upon such matters, from being misled.

Uric Acid, Rheumatism and Pyorrhoa Alveolaris.

By V. A. GUDEN, M.D., C.M., D.D.S., Milwaukee, Wis.

Uric acid and the uric acid theory has received undue prominence in dental literature of today, leading to many hasty conclusions, and irrational methods of treatment. In the first place, the statement often made that the blood may become acid is absolutely incorrect, since there is no such thing as acid blood in the human body. There is, however, a subalkalinity of the blood as a result of faulty metabolism, which is the cause of a number of diseases, and this condition may properly be termed an acid dyscrasia.

Through careless and superficial investigation, the uric acid theory has been accepted by a great many as the sole cause of pyorrhoea alveolaris. A case cited in one of the dental journals intended to corroborate this theory, read something like this: "A patient applied to be relieved from pain in a tooth. The dentist found the tooth painful on pressure, the pulp alive, and on questioning the patient found that there was pain in the joint of the big toe." Such a careless examination was certainly followed by a more careless treatment, with the patient as the sufferer.

Pyorrhœa Alveolaris Defined. Before proceeding farther, it is necessary to define what pyorrhoea is. Nearly every writer gives a different shade of meaning to the term, showing that the dental profession is very unsettled regarding this disease. The general idea—simply pus in the

alveolus, cannot be accepted as conclusive, because that is a condition common to a number of diseases of the gingivae and dento-alveolar membrane. Therefore the term must be restricted in its meaning, if it is intended to convey something definite.

Pyorrhoea alveolaris is a progressive suppurative and destructive disease of the dento-alveolar membrane, running a chronic course, usually resulting in the destruction of the affected tissue, in whole or in part, and in absorption of more or less of the alveolar process. This definition is, like all others, open to objections, since nothing can be positively defined.

Incipient tuberculosis of the alveolar process is not easily differentiated from pyorrhoea. In tuberculosis, the inflamation is much more severe, covers a much greater area, involves the deeper structures, and the constitutional symptoms of tuberculosis—night sweats, fever and

great emaciation are present and more marked than in tuberculosis in the bones and joints of other parts of the body. Usually tuberculosis of the alveolus is preceded by pulmonary tuberculosis, or tuberculosis of some of the glands of the neck. In advanced stages the differentiation is very easy. Necrosis is the usual result of tuberculosis of the alveolar process, while absorption is that of pyturhoea. The inflammation of pyorrhoea seldom involves the deep structures.

A tooth having a live pulp may become painful on pressure from more causes than one: viz., anaemia, reflex neurosis, exostosis, inflammation or degeneration of the pulp, traumatism, mercurialism, lead poisoning, scurvy, etc. In many cases, teeth affected with pyorrhoea are not painful to pressure in the slightest degree.

Anæmia Simulating Pvorrhœa. Anaemia presents some symptoms that can be easily mistaken for pyorrhoea of which the following cases are good illustrations: Mr. L.—, a mailcarrier, called to be relieved of a very distressing pain on pressure, the pulp alive, and the enamel perfect.

The molar preceding had been extracted in the afternoon, the symptoms being like those described in the other tooth, only more severe. On examination, the patient showed marked signs of anaemia, caused by exhaustion and overwork. The patient complained of the severe neuralgic pains, and demanded that something be done to give immediate relief. In the treatment, no attention was paid to the dental symptoms. Morphine was administered to relieve the most distressing pain, and this was followed with a laxitive, and a tonic treatment consisting of iron, quinine, strychnine, and arsenic was prescribed. The patient rapidly gained in strength and weight, his pain left him, and he has enjoyed good health ever since.

Prof. K., a principal of one of our schools, called on me for relief of a severe pain in a tooth whose pulp I had capped some three years before. The symptoms of a dead pulp were so marked that I unhesitatingly cut down to the pulp, but found it alive. An examination of the patient showed that he suffered from anaemia. The cavity was sealed, and the patient placed under the usual tonic treatment. The symptoms promptly subsided, and the patient enjoyed good health since.

These cases are introduced because they have occurred several years ago, and gave occasion for observation such as new cases would not. Bacterial examinations of the pus pockets give absolutely no satisfaction. Pus cells and pus producing bacteria of many varieties may be found in the pyorrhoea pockets, and the results of all isolation cultures have failed to give the specific germ. A series of twenty experiments on animals and three on man (each a rheumatic) were undertaken, each ex-

periment resulting negatively as far as pyorrhoea was concerned, although a number of cases produced abscesses as the result of pus bacteria.

Uric Acid and Rheumatism. The significance of uric acid and rheumatism to the dentist is so small that the dentist would better leave these cases to the medical practitioner as the following part of this article intends to show. The "uricacidemaists" have simply assumed as an es-

tablished fact that uric acid is the sole cause of rheumatism. This theory was accepted without proper consideration by a larger number of dentists than reasonably should be supposed. The most peculiar part of the agitation was, that these theorists immediately had a specific cure for both rheumatism and pyorrhoea, which was advertised and sold with no little skill. That their method of treatment was wrong needs no other argument than that it died as soon as it was born for want of success where it was applied. Their remedies did not even stand the run and sale of the ordinary patent medicine.

A review of the medical literature gives a great variety of opinions regarding the cause of rheumatism. Some authorities claim it is the result of faulty nutrition; others hold that it is an infection; and many claim that both are necessary to produce the disease. Each faction produces its data of clinical experience and results of treatment to substantiate its theory, but none claims to be absolutely correct in either. There are many diseases resulting from faulty matabolism: eczema, urticaria, impetigo, erythema, inflammatory conditions affecting the mucous membrane of the respiratory passages, chronic acid dyspepsia, congestion of the liver, lithiasis, hæmorrhoids, neuralgia, hemicrania, congestive headaches, gout, all forms of rheumatism, rickets, scurvy, diabetis, obesity and polyuria.

Imperfect tissue metabolism, as well as the oxidation of the different foods, results in the formation of the following acids and substances: uric, hippuric, oxalic, oxaluric, carbonic, lactic and lactates, caprylic, caproic, valerianic, butyric, propionic, acetic, stearic, oleic, palmitic, formic, cholalic, taurilic, damaluric, damalic, and succinic acids. Further researches will unquestionably reveal more.

Before considering how uric acid acts as a disease producer, a sketch of it in its normal state will not be out of place. Analysis of normal urine gives about the following.

*Quantity in 24 hoursoz.	50.
Solids in this amountgr.	1000.
Analysis of the solids yields about:	
Urea $(C_5H_4N_4O_3)$ gr.	500.

^{*} Milwaukee Medical Journal, vol. 3, page 1.

Uric acidgr.	10.
Hippuric acidgr.	18.7
Kreatingr.	18.7
	18.5
Xanthin pigments, a trace.	10.5
Aromatic sulphates and other extractivesgr.	т8 5
AT 1 1 1	30.
Phosphates, earthy and alkalinegr	

Large quantities of urates and uric acid crystals are found in the kidneys of the new born. Yet this condition does not produce any pathological symptoms. It is always found in the blood and muscles of all warm blooded animals. It composes a large part of the excretions of birds and amphibians. The excretions of insects are almost entirely composed of urate of ammonium. I injected twenty grains of uric acid into a small dog three times a week for three weeks, without any apparent injury to his health. The murexid test showed uric acid on the peridental membrane in two cases of sound teeth that were extracted from healthy children to correct irregularities. Patients after a fit of epilepsy, children after an attack of convulsions, and hysterical patients after a fit, have their urine heavily impregnated with uric acid.

†"Of all these organic acids carbonic acid and uric acid do not by their presence increase the acidity of the tissues, since carbonic acid never exists in a state of freedom, but is always combined with bases for which it manifests an affinity; and uric acid if uncombined with bases is rapidly eliminated through the kidneys, and does not manifest acid qualities.

"Lactic acid renders soluble the calcarious salts and leads to diseases like osteomalacia and rickets. Oxalic acid exists in the blood of gouty, scrofulous, tuberculous hypochondriacal, obese, and neurasthenic patients."

"Such patients are easily fatigued, excessively irritable, unrefreshed by sleep, have an offensive breath and usually acid feces. The triphosphate of calcium of the tissues yields two equivalents of calcium which combine with oxalic acid, and one remaining acid phosphate of calcium passes in state of solution out of the tissues, and is eliminated in the urine. Hence heavy deposits of the phosphates in the urine denotes active tissue waste."

Here are twenty acids resulting from the same cause, with carbonic and uric acids as the least harmful, and the latter readily eliminated and not able to increase the acidity of the tissues, and lactic and oxalic acids, very powerful pathological agents, and a large number of other acids whose action still needs a great deal of study and experiment before positive statements can be made about them.

All the acids singly and combined are not able to produce rheu

⁺ American Text-Book of Theory and Practice, vol. 2, page 72.

matism. In addition, exposure to cold will not produce it, although other inflammatory diseases may result. Very often rheumatism appears as an epidemic. Clinical experience clearly indicates a hereditary tendency. It may attack any part of the body; it may involve serious complications, and always leaves the patient more or less debilitated. All these factors point to another and more plausible cause, infection.

Sub-alkalinity of the blood, like all other debilitating conditions, must be treated as etiological factors, but does not make them the sole cause of the disease.

Pyorrhœa Not Caused by Calculi.

The claim that pyorrhoea is the result of calcarious or other deposits is erroneous. I have treated a number of cases where the deposits were absent. The formation of calculi in the bile, kidneys, bladder, tissues, or roots of teeth, is essentially the same as

far as the nucleus of the ailment is concerned. There must be at first a continued inflammation, then a retarding of the circulation, then a roughened surface around which the calculi gradually begin to settle.

What can produce pyorrhoea alveolaris? Anything that can produce a continued inflammation of the dento-alveolar membrane, in which the exciting cause can continually act without interruption for a long time, together with an infection of this area by the pus producing bacteria of the mouth.

A long continued inflammation may be produced through mal-occlusion, lead and mercurial poisoning, scurvy, malnutrition through wasting diseases such as diabetis or chronic nephritis, or foreign matter wedging and remaining under the gum margin. When the membrane is subjected to such an inflammation, it will lose its power of recuperation like any other part of the system, i. e., the skin in chronic eczema; all that is needed to produce pyorrhœa is the entrance of pyogenic bacteria, making no particular difference which one—whether they are staphylococci, streptococci or bacillus colli communi, in pure or mixed culture, the production of the disease is complete. As soon as this condition is present, the formation of calculi may begin.



Suggestions for the Use of Iodoformagen Cement.

By Otto Bickel, D.D.S., New York, N. Y.

Formaldehyde has recorded a victorious career, and its appreciation as a trustworthy antiseptic is an undisputed fact. The effort of the dental practitioner to press formaldehyde into the service of the profession has not proved to be a fool's errand. The experiment was a success, but as to the explanation of the effect on the pulp, no understanding has been reached. The battle between the faction championing the life-preserving property of formaldehyde and their antagonists whose war cry is "mummification of the pulp," is raging at its height; but whatever side will gain the laurel of victory, in formaldehyde modern dentistry has made an acquisition which opens a new view to the conservative dentist.

When in the volumes XIX and XX of ITEMS OF INTEREST, I published my first experiences with iodoformagen cement, I could only relate some few cases. But my urgent invitation to make a trial of iodoformagen cement has readily been accepted by my colleagues, and the cement with the tongue-breaking name has now numerous friends.

If I endeavor to give a few suggestions for the handling of the cement, I am induced to do so by my earnest wish to do full justice to its remarkable properties, as well as to win it new friends in the profession.

Iodoformagen cement ought to be kept in a place of moderate temperature. For mixing I use a heavy glass plate, which I heat to the temperature of blood, the thickness of the plate retaining the temperature better than a thin plate would do. The spatula likewise warmed. Thus I have overcome the quick setting tendency of the cement. The consistency of the mixture is rather thin, creamy-like.

I have heard complaints that the cement sticks to the instrument. Every cement will do so unless it is mixed to the consistency of putty. In arguing this question we must point out the office of a capping material. It must cover the exposed pulp without exercising any pressure; nevertheless, it should form a snugly fitting cover to the exposed part.

According to my experience the application of a putty like mixture of cement will always involve a fatal pressure, which can easily be avoided only by mixing it to creamy consistency.

A very convenient vehicle for carrying the cement to the tooth is Dr. Teague's depressed cavity cap disk. A proper sized disk is selected, and grasping it with a suitable pair of pliers, I fill the concave side of the

disk with the mixed cement. Then I place the disk on the mixing slab, metal side down, and turning to the patient I am always able to manipulate the cement before it becomes hard.

If the cement has hardened and you wish to remove the disk, you can do so without any detrimental effect to the cement. The thin metal cap parts readily, leaving the capping material undisturbed in its place.

Iodoformagen cement used in conformity with these little hints, will give astonishing results.

A Mysterious Case.

By R. L. McMullen, D.D.S., Clear Water, Fla.

I was called on Saturday, Jan. 21, to see a boy in his eighth year. He was suffering from an abscess on the last baby molar, upper. His face was so badly swollen that his eye on that side was completely closed, and it was with great difficulty that I could open his jaws sufficiently to feel with my finger for pus. I could feel none, but believing it to be there somewhere (as it was oozing from around the tooth) I decided to lance, which I did on each side of the tooth, but did not get one drop of pus. A physician was summoned, and he advised the extraction of the tooth as soon as possible.

On the day following I was sent for again, and, with little trouble and practically no pain, extracted the tooth. I expected a flow of pus to follow, but, to my surprise, it did not. There was a pocket fully an inch deep along the alveolar ridge, showing that pus had been there. The temporal muscle could be distinctly outlined by the swelling the first time I saw him, and his breath was very offensive. Did not think the case so serious, but hoped that the pus would drain out and the trouble cease in a few days.

Did not see patient on Monday, but was sent for, on the advice of the physician, late in the evening to extract another tooth.

I called on Tuesday and found patient in very bad condition. Temporal seemed dead, very little feeling, and on pressure gave a feeling like wax, and the indentation would remain for some time. The fever was high, pulse rapid, and respiration rapid and labored. On examination found that the tooth in question played no part in the disease, so refused to extract. Patient daily grew worse until Friday, the 27th, when death relieved his suffering. Patient never complained of swollen parts, but always of the top of his head.

I should like very much to hear from some of the older and more learned of the profession, as to the course of treatment they would have advised. I have only been out of college three years, and this is my first case of that character.

Alveolar hemorrhage.

By Dr. H. H. BENJAMIN, Batavia, N. Y.

Alveolar hemorrhage is not a frequent occurrence. I have met a few cases. The cause is simply the drawing of the artery up in the extracted tooth socket forming a loop. The result is the bursting of the artery and hemorrhage commences. To stop the flow of blood is simple.

Report of a Case from Practice.

Ten years ago a lady came to my office to have an upper set extracted, to be replaced in time with artificial. Tuesday, March 6, 1889, the teeth were extracted, and I warned the lady against having her hands in hot water, violent actions, climbing of

stairs or any excitement that might produce an unusual flow of blood. Every word of caution was heeded until Friday. At 4 p. m., I was summoned to Mrs. Metzgar's house. Gums bleeding quite profusely. The blood came from the right central socket, which I plugged, and in ten minutes the blood commenced to issue from the socket of the cuspid, which was treated in like manner, and before 6 p. m., I had successively plugged every socket and cut off the flow of blood.

At 11 p. m., I was called out of bed with the word "haste" attached to the call. When I arrived at the lady's side, the case looked bad. I repacked the sockets with the admonition that entire quiet must be observed or serious consequences would ensue. At 2 a. m., Wednesday I was again called to find my patient delirious—hemorrhage profuse. The sight I beheld staggered me! The blood, when the mouth was open, came out like a flood—patient, "trembling like an aspen leaf." Neighbors had been called in expecting a collapse. I ordered the patient washed up that I might see something besides blood. I rolled up pellets of cotton, saturated them with nutgalls and commencing at the central socket, packed the entire tract. The flood did not cease until I reached the third molar. Here was the seat of the hemorrhage. I made bandages three inches in width and wound them around the head, holding the jaws firmly together, and then around the head from front to back and sewed them together. Sat my patient up in a rocking chair, bolstered both feet

in another chair, took off my coat, dismissed the family and laid down on a couch and slept and watched, watched and slept until 11 a. m., and then came home after ordering beef tea for the patient.

Next I went to the patient's house and unbandaged the head. Not a particle of blood in sight and there was no return. Hence, I say that with pellets of cotton rolled up, about the size and shape of the tooth sockets, the end saturated with nutgalls and forced up into each root socket with pellets of cotton following until the cotton extends to outer margin of the gum, and then with pellets as large as walnuts, antagonizing the opposite teeth, head bandaged immediately, as above described, there may be no fear of a demise as reported by Mr. Geo. Randorf, and I hope that this communication may relieve some brother dentist of an anxiety relative to his patients.

Ball-Ended Pluggers.

By WILLIAM CASS GRAYSTON, L.D.S., Scarborough, Eng.

For some time past I have been experimenting with the object of making perfectly adapted fillings with cohesive gold.

I use small square glass slabs, and make cavities near the corners with carborundum stones. The slab containing the inserted fillings is then immersed for twenty-four hours in ink. The ink is then wiped from the surfaces of the glass and any leakage of the fillings is readily seen by looking through the sides of the glass with a powerful magnifying glass.

I find that perfect results are readily obtained with ball ended pluggers used with a mallet providing a third, a half or even in large cavities a whole of a sheet of No. 4 foil is loosely rolled into a rope and cut up into pellets. The same foil may be folded twice on itself, making four thicknesses or No. 16, as it is often termed, with equally good results, and the production of greater solidity.

Watt's crystal gold also gives perfect adaptation, using piece as large as the orifice of the cavity gently torn from a No. 1 cake. The adaptation produced with the same instruments, using hand pressure, is not quite so good. Watt's crystal gold is better in this respect than foil. It is possible to obtain perfection with this gold used with hand pressure, but the greatest care must be taken.

The value of ball ended pluggers for securing perfect adaptation was discovered many years ago by Mr. Fletcher, of Warrington, England, who is now so well known as an inventor and manufacturer of appliances for utilizing coal gas (see *Dental Cosmos*, February, 1898.)

Relative Force discovered that there is a great deal of difference in the condensing power of the blows of the various mallets. It should be the object of every dentist to do good work with as little inconvenience to patients as possible, and mallet force should not exceed the limit that is readily endured by the majority. Tolerance of force does not necessarily mean strength or weakness of

Tolerance of force does not necessarily mean strength or weakness of blow; the kind of blow has a good deal to do with this. It would be extremely valuable and interesting if the reasonable force of blow of the various mallets could be accurately determined, and the efficiency and speed of the work done by them recorded.

As far as my experience goes, the rapidity of action of the electric and engine mallets is, to some extent, discounted by the necessity of using very thin gold, or of going over each layer several times. The slow action of the automatic mallet is, to some extent, balanced by the patients' tolerance of a fairly strong blow and the efficiency of the blow in general. The hand mallet, although very efficient, is most disagreeable unless used lightly. The weight or quantity of gold that can be condensed at a time must bear some proportion to the force used, and the size of the plugger points, and the rapidity with which thoroughly good work can be done will depend on a consideration of many things.

Fortunately there are several dentists in America who are earnestly endeavoring to place "the filling of teeth" on a scientific basis, and doubtless the above and many other things will in due course be made clear.

What of the Unification of State Legislation?

By G. C. PROBST, D.D.S., Walhalla, S. C.

The proper solution of this question, according to my view, is this: The National Association of Dental Examiners should be authorized, by the various States of the Union, (State Associations), to arrange the examination questions (distinct from the college questions), for all the States. Of course, the questions for this State need not be the same as those for New York, etc., but all on a par.

This having been done, the State Boards of Examiners should be required to use them. And upon sufficient fitness of the applicant, a license should be granted, and the same should be recognized in any

other State in the Union. I think it reasonable, if not always necessary, that the student submit to this final test of his fitness to practice.

The reasonableness of this final test, in my opinion, is based upon two facts at least:

First—Shame, though it is, many diplomas are granted to incompetent men—men who lack intellectual and moral attainments—by unprincipled or bogus colleges. For example, some months ago, I received papers from a so-called "College of Medicine." Through these papers I was informed that I could secure the degree (?) of "M. D." and a "Diploma," for \$25.00, without leaving my home. They claimed that the college was running according to law.

Suppose I held a diploma, obtained in such a way, would I be fit to practice medicine? I could present my "diploma" and "examination papers," too, for that matter, to the State Board. The same thing could be done in dentistry.

Second—Many diplomas are granted, honestly, by colleges, on papers prepared by the students through trickery, therefore I repeat, "It is reasonable, if not always necessary, that the student submit to this final test of his fitness to practice."

We have laws making it necessary for a man to procure a license before he can practice. Let these laws stand. We need no law for the "unification" of opinion among ourselves, except brotherly kindness.

Let all the State Associations of the Union agree on this subject, as set forth in the above, and the question, as I see it, is solved.

In conclusion, the State Boards of Examiners should be required to see that each person proposing to practice dentistry, shall hold a license; thus the profession as well as the people would be protected, which is proper.



A new Scaler for Pyorrhoxal Ceeth.

By Henry H. Tompkins, D.D.S., Utica, N. Y.

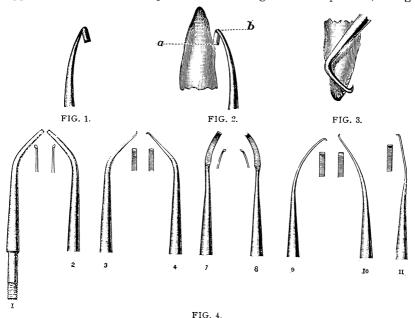
A little over a year ago, I read a paper before the Fifth District Dental Society of New York, upon pyorrhoea alveolaris, dealing entirely with the practical side of the question, and at the same time, showing a set of instruments for the removal of deep-seated deposits, which seemed very admirably adapted to the purpose for which they were intended. The meeting was comparatively a small one, but the oft repeated inquiries concerning the scalers make it seem possible that a short review of the paper, and the incident leading to its presentation, may interest a larger circle of associates.

Like a great many others, I had for years labored hard and persistently, fighting this disgusting disease; had used every remedy of any importance of which I had ever heard, and yet with very indifferent and ungratifying results; had even had the humiliation of having treated a cuspid tooth, to the best of my ability, and having the patient return in a few days, with a fistulous opening over the root of that self-same tooth, a result which I am not now at no loss to account for, but at that time utter discouragement was no name for my condition of mind.

About this time I chanced to see a patient of Dr. Many's. I knew she had suffered somewhat severely from pyorrhoea, and yet to my great surprise the exudation of pus had entirely ceased, the gum tissue had all closed down around the necks of the teeth, and the gums were as bright and pretty a pink as though there had never been any trouble of this kind. I determined to find out how this was accomplished, and went to Connecticut for that purpose. My visit resulted not in learning some great mystery, but in finding that the secret of his success lay in strictly adhering to the well-known principle that absolute cleanliness is the one essential of success, and as a means thereto, he emphasized the necessity for the exclusive use of pull instruments, thereby bringing all loosened deposits to the surface. When a push instrument is used, a syringe is the only means usually employed to free the pocket, and more or less debris is very apt to remain there as an active cause of irritation. This was a new idea to me, and I shall always owe Dr. Many a debt of gratitude for revealing the fact which has enabled me to bring victory out of many cases which otherwise would have been defeat.

This suggested a careful study of pull instruments. Many of this class, supplied by the dental manufacturing houses, are poorly adapted to the necessary requirements, some being clumsy, and others, by their form, defeat the purpose for which they are intended.

A Sheffield scaler may be taken as an illustration (Fig. 1). A moment's study of the point will show that its sharp corners make it a merciless instrument to push beneath and into the gum tissue. Furthermore, as it is placed against the root of a tooth (Fig. 2) to remove a deposit at "a," the point must be necessarily pushed to "b," which, we may suppose, is the base of the pocket, and having met solid process, can go



no further. How can the intervening space be cleaned? It is simply impossible to do it. Cleanliness being the keynote of the situation, the instrument becomes almost useless. The same is true of the King scaler; in addition to which, the blade is too heavy and is not made at a proper angle, for as the handle is passed over the front teeth, and we attempt to follow the root of a bicuspid or a molar, it will be found to sustain some such relation to the root, as shown in Fig. 3.

The best point of any with which I am familiar, is the Allport No. 4; but this, in form, is practically like a good many others. They all lack aggressive qualities, and are too much inclined to slide over deposits instead of dislodging them.

I have, therefore, devised a point (Fig. 4) which is a pull instrument, and when reduced to proper size, the character of the point is such that it will pass to the extreme base of a pocket, without further destroying healthy tissue, and will take a positive hold, and with careful manipulation, bring out everything before it.

At our meeting in Syracuse I exhibited a set of twenty-two instruments which I had made from time to time, embodying this principle. The nine here shown were selected, at the request of several present, as being the most useful, none of which I feel that I can do without in my own practice. They are not catalogued, but a few sets were made up, by special order, and the letters which have since been received testify to their efficiency, and the comfort of the operators using them. The difference between this point and the other points referred to, consist in the fact that this is not only a hook, but it is a moderately sharp hook, and placed at such an angle, that as the blade is sprung under manipulation, it goes absolutely to the extreme limit to which the disease extends, and does not leave a space beyond the point which cannot be cleaned. It will be seen at a glance that most of the blades are simply modifications of standard patterns; but to my mind, in that modification, and a point of this specific form adjusted to each, is all the difference between a useful and a useless instrument; the difference between success and failure.

Of course, there are cases in which neither operator nor instruments can succeed, and it is well to exclude patients of advanced life, and all others who will not co-operate and assist us by the use of systemic remedies, suitable food and regular exercise, thereby improving the general tone of the whole system.

By far too many operators take hold of this trouble in a half-hearted, discouraged way. The same instruments and the same remedies in different hands, will produce very different results; and in order to be successful, one must take hold of the work before him with firmness and determination.

As has been recommended, I use, in connection with this work, trichloracetic acid, full strength. This remedy not only acts as a solvent, but its judicious use causes a slight sloughing which seems to be particularly stimulating, and healthy granulations soon spring from the gum tissue. Place a small quantity of the acid—say, one or two drops—in a convenient receptacle, dip the extreme point of the instrument in it, carry it to the base of the pocket; repeat as may be necessary. Take one tooth at a time and clean it clean, no matter how long it takes; syringe the pocket with any soothing antiseptic, dry the pocket as well as conditions will allow, and fill it with a paste of powdered pepsin and boracic acid in vaseline (suggested, I believe, by Dr. M. L. Rhein), and then do not

touch that tooth again; it being understood that a proper mouth wash or spray has been prescribed, and its use insisted on. It will, I believe, be found that there are hundreds of cases, which, if dealt with in this manner, will come back to us in a short time with most satisfactory results.

Is the case cured? It is generally accepted that the cause of this trouble is not a local one. Like causes produce like results, and we must not be disappointed if the same condition returns when the cause which produced it has not been changed. Observation would seem to indicate that just in proportion as we are able to modify these conditions, will the work be permanent. It will, probably, be necessary to watch all favorable cases carefully, and occasionally touch a place here and there, but the grand fight will have been made, and the question as to whether those teeth are to be lost or saved—definitely settled.

It is unnecessary for me to say that I have no interest in the manufacture or sale of these instruments. My motive springs from a sense of profound gratitude for the help I have received from others, and the hope of aiding some one, who, like myself, has been struggling with what is so generally conceded to be the Waterloo of dentistry.



Donations to the Army Medical Museum.

(Continued from page 104.)

The following contributions have been received for the Army Medical Museum:

Dr. A. G. Smith, of Yokohama, Japan, sends some specimens of which he says: "I send you six old fashioned Japanese wooden artificial dentures. These plates are now becoming very scarce and rare, and I



FIG. 46.

deem them of sufficient interest to occupy a place in the Dental Department of the Army Medical Museum, and trust that the committee will agree with me and give them house room. They are carved out of solid wooden blocks, and some have white stones let in the front to represent teeth. In olden days it was the custom for the married women to blacken their teeth, to show that they were married, and in such cases black stones are let in to designate the matrimonial condition of the wearer.



FIG. 47

In some cases, for sake of economy, the entire plate is carved out of one piece of wood. As far as I can learn, the process of manufacture was as follows: An impression was taken in wax or clay, then the artisan after selecting a suitable piece of wood proceeded with chisel and gouge to fashion, by aid of his eye only, the palatal surface, and then carved the

teeth and remaining portions. After the plate was roughly shaped, it was tried in the mouth and the piece fitted by the cut and try method; and I also send a tooth from the mouth of a Jewish lady, born and raised in New York. Its interest lies in the fact that it has no enamel or small portions only on cusps; the entire set of teeth was entirely devoid of enamel. An exhaustive account of this case was published in the *Cosmos* some eight or ten years ago."



FIG. 48.

no. 89.

Tooth devoid of enamel.

No. 90.

Full upper set carved from wood, teeth blackened and molar region filled with nails, which served for masticating surfaces (Fig. 46).

No. 91.

A similar set from which the teeth have been lost, the specimen showing considerable signs of wear, the nails even having been badly worn (Fig. 47).



FIG. 49.

no. 92.

A lower set, teeth blackened. This is a beautiful specimen, the teeth being admirably shaped. (Fig. 48).

No. 93.

A lower set with white teeth, the molar region again filled with nail heads, and this plate also shows signs of much wear, the teeth and nails being badly abraided (Fig. 49).

ITEMS OF INTEREST

No. 94.

No. 95.

Apparently a part of an upper set, judging by the size of the teeth, which in this instance are white (Fig. 50).

Similar specimen, interesting because it is a partial piece. The teeth are white (Fig. 51).



FIG. 50.

Dr. F. H. Caughell, of Morrison, Mo., makes a contribution of a piece of bridge work (Fig. 52) which exemplifies the great value that the museum collection might have been to dentists, if such specimens had been deposited many years ago.



FIG. 51.

This is an authentic piece of removable bridge work which was made between the years 1840-45, for Mrs. Robert Baker. The doctor furnishes the following upon inquiry: "Replying to your inquiry regarding the bridge, will say that I saw Mrs. Atkinson, and she informs me that the pins on the laterals were longer when the bridge was placed in her moth-



FIG. 52.

er's mouth. The centrals were extracted and the bridge held in place by the pins in the pulp canal. The roots were not banded. I think it is a valuable acquisition to the profession. There can be no doubt as to the truthfulness of the statements of Mrs. Baker's children. I wrote to three

of them and they all tell the same story. The bridge was made by Dr. Gauson, of Batavia, N. Y., and was worn for fifteen years with complete satisfaction."

Dr. W. A. Allen, of Billings, Mont., contributes two models from the jaws of Indians, one of immense size, both of which will figure in an article by him in our next issue.



FIG. 53.

Dr. J. A. Hayes, of South Framingham, Mass., makes the following contributions:

A lower incisor with tremendous incrustation of salivary calculcus (Fig. 53).

No. 100. Salivary calculcus (Fig. 53).

A three rooted bicuspid.

No. 161. A tooth bearing a horribly constructed gold crown.

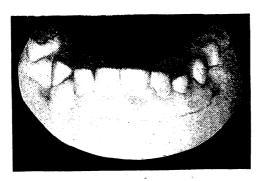


FIG. 54.

Dr. M. H. P. Clark, of Ramseur, N. C., contributes:

Specimen of a very tiny third molar with long curved root, taken from the mouth of a man weighing one hundred and forty pounds.

No. 103. Four rooted wisdom tooth.

No. 102.

no." 106.

ITEMS OF INTEREST

A large pulp nodule taken from the sixth year molar of a man twenty-three years of age.

A peculiar third molar having three confluent roots; very long.

Dr. E. S. Fuller, of Piqua, O., donates a model showing the eruption of a permanent cuspid in a position posterior to the temporary cuspid which is re-

tained, a similar condition having occurred on the opposite side, the temporary tooth, however, having since been lost, leaving a bad space. (Fig. 54). The bicuspids have never appeared.

We have thus, up to date, received for contribution to the museum over one hundred specimens, all of which are of value, many of them being exceptionally rare. We are pleased to have passed the one hundred mark, but, with the assistance of the profession, shall hope through our pages to add a thousand specimens to the museum. A few others are still in our possession, which will be acknowledged later.





H Dental Fouse Boat.

By Dr. F. H. HOUGHTON, Daytona, Fla.

A few lines as to the prompting of my present plan of practice on the east coast of Florida, may interest the readers of ITEMS OF INTEREST.

First, my means of reaching the people in past years has been by rail or steamer, necessitating loss of valuable time in transit, packing and unpacking outfit, etc. Then as practice increased, and the modern ideas and improved methods required an increase of armament, so to speak, the thought came to me, "How, and by what means, can I reach these people in a practical way and with a more complete outfit?" And then the idea of a floating dental office came to me.

But was it feasible? Was it practical? I insisted it was, provided I could furnish a vessel of kind and strength for the purpose. My friends said the vibration or motion would be such that I could not operate with comfort. And yet, in spite of discouraging counsel, and at an expense of several thousand dollars, I constructed the vessel, giving her the suggestive name "Dentos," (sixteen thousand feet of lumber used in construction), and am happy to say that my fondest hopes, as to the practicability of the plan, are fully realized and more.

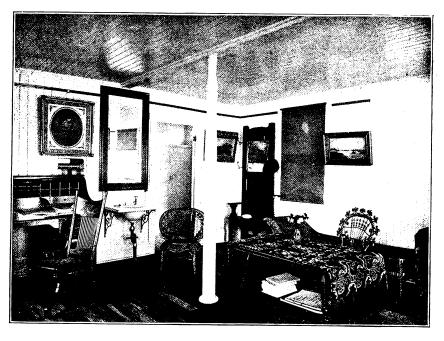
I have been operating on the "Dentos" constantly since December I last, and can truthfully say there has not been an hour during the whole time when I could not operate at the chair with ease and comfort, notwithstanding we have had three hard blows, or winds, of three and four days' duration. Thus the practicability of the floating dental office is fully established.

My plan of notifying the people of Dentos visits is either by card or some of the weekly newspapers along the coast. The Dentos does not run on schedule time, so a day earlier or later, as the case may be, makes no difference.



Dr. F. H. Houghton and his Floating Dental Establishment, "Dentos."

On several occasions I have operated at the chair for patients in transit. It is truly novel and like a dream. As you look from the window and view the stately palm trees and other tropical plants, on either side of the beautiful river, I can truly say there is nothing monotonous or tame in life on the Dentos. Every angle or curve of the river presents a new picture, and the passing up and down of the numerous launches—both steam and naphtha—interspersed with white wings of sailing yachts, tends to enhance the enchantment of the situation.



Reception Room.

At this writing, the Dentos is moored at Rock Ledge, one of the most attractive and popular Florida resorts on the far-famed Indian River

So far I have no remarkable nor startling incidents to relate, and the things I have said in regard to Dentos' practice may be in part only what many readers of ITEMS OF INTEREST would like to know; therefore, I will invite any who would desire information other than given in this article, to address me at this point, care of Dentos, or through ITEMS OF INTEREST, and I will cheerfully reply.

Dentos is a floating vessel, fifty-three feet long, over all, deck twenty

feet broad, hull twelve feet broad and two and one-half feet deep; planned and built under my personal supervision, after having spent the winter seasons for the past eighteen years in practice of my profession in the towns and cities along the waterways of the East Coast of Florida, the most of which are without a practical dentist. The route is along the Halifax. Hillsborough and Indian Rivers, the most beautiful, healthful and picturesque part of Florida, along the shores of which are located beautiful towns and cities, inhabited by intelligent people, mostly Northern people, who have settled here, not only to escape the cold of the Northern winter, but to breathe the air of the balmy, health-giving cli-



Operating Room.

mate. To meet the requirements and necessities of these people, whose numbers aggregate many thousands, was the Dentos built. She is modern and complete in every detail, and equipped with modern machinery and appliances, to meet the demands of an intelligent people for anything in the line of modern dentistry.

Hull made entirely of selected heart cypress. Planking one and onehalf inches thick, over which, above water line, is cypress sheathing seveneighths inch thick. Cabin made of Georgia pine, ceiled outside and inside. Total length of cabin room, thirty-eight feet; width, fifteen feet; divided in four apartments. Front cabin twenty-one feet long; after cabin eleven feet; both full width of boat. Intermediate staterooms, starboard, five by eight feet; capacity, three berths. Toilet on port side, five by six feet. Copper, tin-lined tank, holding about five barrels of water. Connections from roof from which an abundant supply of soft water is always on hand. Supply and overflow pipes are all of copper and lead. Italian marble washstand in forward cabin. Galvanized iron sink in after cabin, both supplied from the tank, which lies horizontally and extends amidships; elevated so as to supply both the stand and sink. All modern plumbing. Two outside doors six feet three inches by two feet six inches; large glass in upper half. Three inside doors of same dimensions. Double floors. Cabin eight feet high. Has six windows, double sash, single lights, double thick; four large transoms, colored lights; also transoms over each outside door, colored lights. Windows and transoms screened with bronze wire. Outside blinds to windows. All fastenings made of brass or bronze. Six ten-inch cleats bolted through deck. Two anchors, one hundred pounds each; one anchor, sixty pounds; also large Gypsy windlass. From six to ten people could live in comfort on the Dentos.

Naphtha launch Rowena is twenty-five feet long, four horse power, Herreshoff model

Dentos has three coats of white paint on outside and two inside. All new. Completed in November, 1898.

Carrying capacity of Dentos, ten tons. Draught, fourteen inches. The rowboat Helen, fifteen feet long, is rigged with sails and oars.





A Consideration of Some Forms of Stomatitis.

By DWIGHT L. HUBBARD, M.D., New York, N. Y.
Read before the Second District Dental Society, February, 1899.

I shall attempt to give you only the most practical points of the broad subject just given. To exhaust it would require more time than your patience would permit or would be allowed by your by-laws. I shall therefore pick a truth here and there as one would pluck a flower from a garden rich in treasures.

Stomatitis Defined. The term "stomatitis" means inflammation of the "stoma," or mouth. Botany and physiology here come together upon a broad basis and furnish a word referring to the main receptacle for nutrition, wheth-

er the recipient be vegetable or animal. Nutrition may come through the roots of herbs, but the "stoma" is always active in propagation of sustenance. Whether plant or animal, the "mouth" is very important in having a function which, more than all others, first administers to the well being, if normal, or to the detriment, if abnormal, of the individual to which it is destined to contribute.

It goes without saying, therefore, that the mouth is an important structure, inasmuch as it is constantly in contact with the atmosphere, whether pure or contaminated, whether sterile or infectious. The mouth is also the channel through which the tissue building nutriments of the body are taken. So, different from plant organisms, the mouth serves a double purpose (if I may make a botanical comparison) of roots; also as a receptacle for oxygen. In this we come to finer points of etymology than using the word "stomatitis," thinking that it means something definite, for its application is very broad and practically means "inflammation of a cavity." The pathological variations to which the mucous membrane of this cavity is liable, are many. Given, an abrasion on the outer surface of the body, i. e., the skin, different forms of micro-organisms are liable to be taken into the lymphatic and arterial circulation. The peri-

phery of the body is liable to traumatism of different kinds, and chemical changes due to the excretions. So, the mucous membrane of the mouth is even more liable to the dangers named above. It is subject to extremes of heat and cold; on account of the inspired air subject to contamination by pathological organisms; and in a very emphatic and radical degree, subject to chemical changes. I would lay particular stress upon the latter, because the secretions of the mouth are easily changed from alkalinity to acidity, thereby becoming a direct source of irritation to the mucous membrane. Pardon me if I refer to the histology of this membrane. It is composed of basement epithelium upon which is placed the squamous epithelium (meaning scale-like or flat), and spread upon these is the ciliated epithelium, placed there for the purpose of excluding invaders. During inflammation these cilia are powerless on account of their inability to move due to fixation caused by the infiltration. The interstices between them therefore become ready receptacles for the lodgment of foreign material whether it be a chemical product or one of the many forms of micro-organisms. Take the word stomatitis in its broad sense, and it will be necessary for us to consider the whole pathology of inflammation.

Following any traumatism of the mucous membrane of the buccal cavity, we have rush of blood to the part. This is Nature's first effort to repair; in other words, we have a hyperaemia or congestion which brings added nutrition to that part. The material sent there carries leucocytes which are the producers in various ways of all kinds of tissue, but according to the individual character of that tissue; to the basement epithelium, tissue of the same character, to the ciliated epithelium the kind of material which shall supply its necessities.

All the forces of Nature, both chemical and physical, contribute to the building up of that which is lost, or perhaps, on account of human perversity in desiring to receive more than its share, Nature overdoes its work, with the result that we have an overgrowth of cellular elements and too much epithelium, or other tissue is formed. Rebellion is the result, and as far as possible the excess is absorbed.

To summarize the foregoing, we have in their natural order, hyperaemia, additional nutrition, overgrowth or hyperplasia and hypertrophy; or, through Nature's efforts to eliminate, we have following the hyperaemia, absorption, induration and atrophy.

With the first, the common signs of inflammation are always present in greater or less degree, producing finally, all the possible pathological results, evidenced by the formation of all varieties of neoplasms which may remain benign, or through cellular change and disintegration may become malignant. Thus, papillomata, adenomata, carcinomata, sarco-

mata, epitheliomata, degenerative tumors, such as cysts of many varieties, etc., may be the result.

With the second, i. e., elimination and absorption, scar-tissue, keloid and other changes of an indurative character may follow.

Total debility accompanied by an impregnation of the system with tubercle bacilli, etc., is responsible for breakdown, both locally and constitutionally.

What have we now to determine? Take the physical change. We get induration and we have a scar. That scar may indicate tissue changes and cellular changes, and we may have what is quite another kind of malignant growth, and in the case of syphilis or tuberculosis, a scarred surface. In the change from benignancy to malignancy, the line is not very sharply drawn, and it may go from one to the other very rapidly.

Inflamed mucous membrane of the mouth indicates a rebellion on the part of Nature or this mucous membrane. Local depression ends with devitalization, and a breaking down of tissue—a passing away of products that should have been very nutritive, and an ulcer results.

In the interior of the body you have the same process and instead of an ulcer, you have an abscess—suppuration. An ulcer is merely a suppuration on the surface, and an abscess is a suppuration beneath the surface, in a closed cavity.

Creatment of Stomatitis.

The treatment is indicated by the pathology on general principles. Relieve the hyperaemia. Constitutional remedies may be of various kinds—a Seidlitz powder, five grains of bicarbonate of soda, etc. I

was brought up on ten grains of calomel and ten grains of jalap powder. My father was a physician, and he believed in heroic remedies.

What I want to convey is simply this: Relieve the whole system; relieve all pressure, and in that way relieve local congestion or hyperaemia. Relieve this constitutional pressure, by the pill or otherwise. Eliminate it from the body, whether it be from the bile, kidneys or skin, which is also exceedingly important. A cold plunge into freezing water every morning is a good thing not to do. A good thing to do is to get up a perspiration and relieve it in that way.

As I said before, not only the constitutional, but the local treatment depends upon the pathological points which we have been considering. We wish to relieve the congestion locally also. I cannot tell you dentists anything about that. Your treatment is first-class. I have only admiration for the many different things dentists devise to relieve local congestion. I think, however, you depend a little too much on tincture of aconite and iodine, though they are both good things, acting very much as iodide of potassium would, taken internally.

I remember a book that I was very much interested in when a mere boy and first began studying medicine—one in Wood's library, entitled "Rest and Pain." It taught me that Nature relieved pain, congestion, suppuration, the formation of tumors, and every human ill by rest, and it is a good thing to give not only constitutional rest, but local rest, whether that constitutional rest be brought about by sedatives, or whether you do it by local anaesthetics: I do believe that local anaesthetics are excellent for the relief of congestion

We will pass on to the third stage. You may have used a split raisin or fig. Some of these old-fashioned things are very good, but I believe a hot pack is more cleanly, and a little more antiseptic. When you come to the stage of hypertrophy, you have to relieve ulceration of the surface of the membrane. That ulceration may be caused by a disintegration or breaking down of the buccal cavity, chiefly around the base of the tongue. You will notice that very frequently. Syphilitic mucous patches more frequently occur in the pharynx and post-pharyngeal wall than anywhere else in the mouth. That is well known among surgeons, and dentists also have observed it

Suphilis and Diphtheria.

Referring again to the oral cavity, the different forms of stomatitis have far reaching results. It may be only a simple form of thrush, or an apthous, diphtheritis or syphilitic inflammation; the possibilities point to a necessity for early recognition or prompt cure.

Differentiation between these different forms is extremely necessary to the dentist; indeed, it is even more important to one practicing this medical and surgical specialty than to the general medical practitioner. To determine between the indurated edge, depressed gravish center of an initial syphilitic sore, and the common white continuous surface with irregular edge, is certainly an important accomplishment. To determine accurately between the irregular contour and par-boiled looking area of a secondary syphilitic mucous patch, and the characteristic gray, inflamed, infiltrated edges of diphtheretic patches, is not easy but very necessary. The history of the patient is thought to be valuable, but experiences teaches that patients know less concerning their own ills than about the complaints of others—this is human nature.

In all the conditions attendant upon all forms of stomatitis, the constitutional aspect of each case is quite as important as attention to local treatment.

You may think I am departing from the old principles of primary, secondary and tertiary stages of syphilis. I speak of it in this way because secondary syphilitic patches come more easily in cases already affected by the primary lesion. They are not strictly in connection with the primary lesion.

You have the stage of secondary infection by means of a drinking cup, and in the case of careless ladies who take ten cent pieces into their mouths in street cars.

In diphtheria we have the Klebs-Loeffler bacillus, but frequently we send a tube to the Board of Health for examination and they find no Klebs-Loeffler bacilli. I remember sending a tube of carefully taken culture and the report came back, no bacteria. I sent another one the second day afterward which I was even more convinced contained the bacilli. It came back with the report no bacteria. I then took a third tube, containing no culture, and the report said it was loaded with bacteria. It was simply a case of carelessness in the Board of Health. I will say, however, that it was not the present board, but a former one. They are probably more painstaking now.

The point I want to make with regard to this is two-fold, diphtheria and syphilis. I want to tell you, if I may be so presuming as to attempt to instruct you, the differential diagnosis between secondary mucous patches and diphtheretic deposits. Because a patch is located upon the anterior aspect of the uvula or palate, and because it has raised edges, and a white exuded center underneath these edges, and more or less of an inflamed ring or area surrounding, is no reason that that patch is a syphilitic mucous patch. It may be a diphtheretic patch.

In a secondary syphilitic mucous patch, there is one point I think important—the fibrous middle part of that patch, and also the looks of the individual. In the syphilitic patch there is no constitutional depression, a good healthy look as a rule, and no acute constitutional symptoms. In the diphtheretic patch, you will have extremely marked constitutional depression. You may have some fever, but you will have more often that extreme depression.

I depend very largely in the diagnosis between syphilis and diphtheria upon the constitutional symptoms, because I have seen them so much, day after day, where I could hardly tell the difference.

If you find an irregular patch upon the anterior aspect of the uvula without the constitutional symptoms, you may be pretty sure that it is a syphilitic patch.

If you have it upon the tonsil, where it is making a hotbed for microorganisms, you may be pretty sure that that is no syphilitic case; it may be a follicular tonsilitis.

If you find it on the posterior wall of the pharynx you may suspect syphilis, and not diphtheria. If you find it in the naso-pharynx, it is diphtheria and not syphilis.

When you have that hole in the center, and that indurated circle—not a circle, but an irregular ring around it—hard, without an inflammed

area, whether it look gray, vellow or white, you are pretty sure to have a syphilitic patch there

It is very seldom you find secondary patches in the anterior part of the buccal cavity—very seldom on the lip: they are apt to be primary lesions when you find them there.

Treatment

The points of treatment in these two depend upon the pathology. Destroy the bacillus, the origof Mucous Patches. inal cause, first relieving the general constitutional symptoms.

As a general principle, whether you use chromic acid, nitric acid, nitrate of silver, or boric acid, which is not a caustic, or whether you use dry chlorated acid, the common sense treatment is to destroy the infection

Nitrate of silver seems to be more accepted than anything else, but I think it is altogether too strong; I think it is better to use it in solutions of not stronger than twenty to thirty grains to the ounce, and not use the stick. The action of nitrate of silver is to destroy the bacilli and to create a mild form of healthy inflammation instead of a diseased one. I use about a 20 per cent. solution of chromic acid in secondary mucous patches. Of course in the secondary stage the iodide of potassium should be usedsaturated solution, five drops, which is five grains; run up one drop every day, until you reach the constitutional symptoms of iodism, which consists in frontal headache, etc.

The treatment of these ulcerations depends largely upon whether they are active or indolent. I expand upon this before students, but it is not necessary here.

I do insist upon this principle—that there is a bit of history away back to be taken care of, in the case of indolent ulcers. Heredity is to be considered. I like that old word they are taking out of our dictionaries —dyscrasia. It is well to assist the stimulation of the local sore by means of nitrate of silver, as a rule, but other things which fit the case should of course be considered. Sometimes in the exceedingly active stages sedative treatment is required—not a local anaesthetic, and let me beg of you not to use cocaine for temporary relief. It does no good at all; it does much more harm than good, and it is better for the patient to suffer a little pain. In these cases of abscess it is very frequently the rule to prescribe (unknown to the patient), one or two per cent of hydro-chlorate of cocaine, to be used upon a cotton pledget. The danger of its use to the arterial circulatin is to be deplored. The sedatives, what are they? In the shape of subtle morphine solutions, cocaine, eucaine, alkalies. The best antiseptic is common salt water, which has been brought to the point of a normal salt solution. Always use it warm, so that Nature does not rebel

—not too hot, but according to the temperature of the body. The alkaline solutions include the three that I teach. I have twenty or thirty others, all good in their way.

The three which I designate by the name of sedative are for the relief of hyperaemia, for the destroying of pathogenic micro-organisms. Many use formaldehyde, a very good antiseptic, but generally too much of it.

I have not given you any prescriptions. I might go on ad infinitum, but I give you just a few little practical points.

Our Female Patients.

By H. B. Huver, D.D.S., M.D.

Read before the Eighth District Society, March, 1899.

The members of the dental profession always take special pains to impress upon the public that we are as much a specialty of medicine as the medical graduate who confines his practice to some special organ, as the eye, ear, nose and throat; but are we justly entitled to such claim? Not that the teeth and oral cavity are not of as much importance as some of the other special organs which are much less numerous and far less susceptible to the ravages of disease; nor in our ability to treat the diseases of our chosen field, but in our preparatory learning and afterward treating them as a distinct and separate organ regardless of the intrinsic body as a whole. Just so long as we do not give more attention and thought to the surrounding organs and particularly to the whole body, just so long will we be in convincing the people that we are not inferior to the other specialists of medicine and our work be considered merely mechanical dexterity.

It is not of the profession as a whole that I speak, but, I regret, by far the greater portion. Is it not a frequent occurrence in our profession to see men of inferior ability as operators commanding some of the largest practices of their respective localities? Why? is the question we often stop to consider. Tact, observation, thorough cleanliness of person and surroundings, sympathy and honesty are in my opinion their stronghold. These men are considerate of their patients; they observe their conditions and wants and govern themselves accordingly. In no part of

our work is there the opportunity to use our power of observation and tact as in the treatment of our female patients, and it is to a few of their necessary ailments that I wish to solicit your time.

The Woman's Burden.

Nature seems to have been unjust to women in that it has caused her to be in constant care of herself most of her life by giving her certain physiological functions not existing in man, which cause her considerable anxiety from an early period and extending

through the greater portion of her existence, which normal function is in itself a great inconvenience; but it is much more so when it becomes deranged, as many of our physiological functions are in modern days. It is now my object to take you through the various periods of her existence such as may be of value to us from a dental view.

Menses, turns, monthly sickness, flow and catamenia are synonomous terms meaning a normal discharge of blood and mucus from the mucous membranes of the tubes and uterus, varying from three to eight ounces in quantiy, and having a more or less characteristic odor. It occurs earlier in life in warm climates than in cold, earlier in the cities than in the country, and earlier in the higher walks of society than in the lower. But in the temperate zone it usually occurs between the fourteenth and sixteenth years, which is called the age of puberty. This period is preceded by what are called the signs of puberty. They consist in the development of the womanly beauties, physiologically designed to attract the male, as enlargement and rotundity of the breasts and hips, a growth of hair upon the genitals and under the arms. Striking changes occur also in the inclinations and emotional susceptibilities of the woman. The periods are somewhat irregular at first, but soon assume a routine course of twenty-eight days, or a lunar month, and last from three to eight days, with five for the average. During the periods the woman assumes certain mental signs and physical appearances, as a general lassitude, dullness of mind, irritability of temper; hysterical attacks are more pronounced and of greater severity in those subject to hysteria. Ecchymosis takes place in the areolar tissue under the eyes, flushing of the face and shortness of breath upon exertion and a frequent desire to urinate. In those patients in whom the flow is slight in quantity there is apt to be bleeding in other portions of the body than from the genitals, especially those localities where the blood vessels are near the surface, as stomach, lungs, nose, and not infrequently in the oral cavity. This condition is called vicarious menstruation. If this condition is evident the patient should be immediately warned and sent to consult her family physician.

It not infrequently happens that patients make an appointment for dental services during this period. In working for a patient in this condition we have a much more trying ordeal than is generally supposed. The patient is much harder to satisfy, she is more restless and uneasy, both from a full bladder, (which is much intensified by the mind), and a general feeling of lassitude. Patients who are usually able and willing to undergo quite severe pain will now flinch and complain, even breaking into tears at the slightest symptom of pain. The face will become flushed, the eyes bloodshot and the patient leave the chair with a violent headache. In pacifying and satisfying patients in this condition all the ingenuity, skill and kindliness of the operator are required.

Relations of Operator to Female Patients.

There are three degrees of relations with our patients which admit of various proportions of freedom. First, where both patient and operator are unmarried; secondly, where one or the other is married, and, third, where both are married.

The first condition is much the harder of the three. In this case it often is advisable to take the patient to the chair, do a little of work and send the patient away, if necessary even with a temporary dressing, or to excuse one's self on some readily made explanation. Often the suggestion or question, "Are you not feeling like having work done this morning?" will be resented.

In the second classification there is considerably more liberty granted, and the patient will be only too thankful to hear you say, "I am afraid you have a headache and are not feeling well this morning Miss (or Mrs.) Blank, and I will excuse you from your appointment." In the third there should not be the slightest hesitation in being frank, as you will find in these patients that there is not the least resentment if you broach the subject in a straightforward manner, as if you were well versed in its diagnosis, and acting as if it were your usual mode of procedure.

In all these conditions it is advisable to have another woman present.

Dental Creatment During Pregnancy.

The next ordeal through which women pass who assume family cares, is pregnancy, or gestation. It will be very hard to make a sure diagnosis of this condition at first from the signs that can be seen, and

which are all that are available to us. These signs are, the expression of the face, pigmentation upon exposed parts, salivation, enlargement of the breasts and abdomen, irritability of the mind and changes of disposition; peculiarity of gait, rapid disintegration of the teeth (hence the old proverb, "for every child a tooth), odontalgia (often not to be accounted for), nausea and vomiting, especially early in the day and upon the inhalation of certain odors. Patients in this condition with the possible exception of the young mother, for the first time, usually manage to make you aware of their condition through some remark, or by their husbands, or possibly by

some older woman friend. This condition admits of more latitude for the display of good judgment and knowledge than almost any other arising in our practice. All rules should be laid aside and the case treated on the principle of the old adage, "What cured the blacksmith killed the tailor!" You are to be guided in your treatment by the age, weight, general health, disposition, temperatment, family and personal history of the patient.

Your first duty should be a clear and explicit conversation upon the conditions. The most minute details should be thoroughly explained; the probable result, the prospects of failure or a serious result, should be considered, and in that way the confidence of your patient be gained—a factor of no mean proportions. Reassure them and make their mind as free as possible. If possible see them out of your office for the first time. My friend Dr. Van Woert once related to me an experience he had with a patient who aborted immediately upon her entrance into his office. Now, imagine yourself in the place of the genial doctor, and you will readily see how we cannot be too cautious with this class of patients.

If the patient gets into your operating chair, have the foot rest down as far as possible; raise the chair as cautiously as possible, and if necessary to tip backward inform your patient, as she may become frightened and spring forward and by so doing give herself pain, if not more serious trouble. Repeat when again replacing and lowering. Avoid in every possible manner touching the person of the patient (a fault which is entirely too prevalent among many practitioners with an ordinary patient.)

For the odontalgia all the teeth should be examined with the most scrupulous care for caries. Where I am unable to find any cause for the described pain, I apply some slight counter-irritant, as tr. iodine, tr. aconite, chloroform, or tr. capsicum to the designated area and advise the use of liquor calcis as a wash, and afterward swallowing several times daily, cautioning them to avoid sour food and spices—a thing which is often hard to control as they seem to crave abnormal foods. Phillip's Milk of Magnesia is often effective when used the same way, where the magnesia does not act too freely upon the bowels. Suggest that if their physician allows it, some form of the hypophosphate compounds would be beneficial, avoiding those which contain quinine. The teeth should be cleansed after meals with some one of our numerous mouth washes, which are much enhanced in value if used warm.

The extraction of teeth as a rule should be avoided for their sake more especially than from any injury to the patient. Old roots and chronically abscessed teeth should be extracted, avoiding, any more display of instruments or of pain than is necessary. The use of local anaesthetics I ordinarily limit to topical applications, although there are cases requiring hypodermic injection of some anaesthetic, par excellence among which I

consider eucaine B, and avoiding the treacherous cocaine. With a sterile fluid, needle and hypodermic syringe, and with sufficient time to avoid damage to the cellular tissues, I never have seen sloughing gum tissue follow. I consider that the shock varying in amount in different patients following extraction will seldom give the serious systemic effect that a continual and severe pain does. As for the tendency toward birth marks and deformities in the child, it is too ridiculous to even consider.

In my practice there are only two classes of fillings which enter the teeth of the pregnant or nursing mother, namely, cement and guttapercha, preferably the first. I consider it the height of folly to spend hours in placing large gold or amalgam fillings, often inflicting pain, to make the cavity retentive, only to see the dark line characteristic of caries formation within a short time.

I avoid trimming the cavity edges, just securing space enough to excavate the necessary depth to allow of thorough dryness of the cavity, saturating the remaining portion with some antiseptic, redrying and filling. A superabundance of saliva frequently necessitates the use of the rubber dam, which is to be ordinarily avoided wherever possible, as it will frequently aggravate the tendency towards nausea and vomiting.

This same nausea and vomiting is frequently aggravated by work in the mouth. As the physicians are at a loss to relieve it we can expect to ameliorate it but slightly. The following prescription has been of the most value to me of any tried so far for temporary relief, and is usually efficacious in ordinary emesis:

Cerii oxalatis gr. xv.

Bismuthi sub carbonatis, 3 ss.

Magnesii calcin-levis, 31.

M. Lig. Teaspoonful in a claret glassful of tepid water. Well stirred.

Care of Women During Eactation.

While undergoing the strain of feeding a child as well as building up her own system, we can readily see that a woman is not in condition to undergo much mental or physical strain as is often necessitated by dental operations. She is much more sus-

ceptible to pain and anxiety which act to a certain degree upon the milk which she excretes.

It is not infrequent to see a child suffering from convulsions arising from nursing from an angry, excited or grieved mother. Is it not then plausible that a prolonged painful dental operation may bring about this same result?

The mother is able to leave the child but for a very short time, and for this reason she is given my first appointment in the morning or immediately after luncheon in order to obviate any unforseen delay. The work should be only of a temporary character.

There should be no hesitancy in the use of general anaesthetics, but those of hypodermic injection should be invariably avoided.

The woman should be cautioned to thoroughly use a breastpump after dental work

The Elimacteric Menapause.

This is the time to which every woman looks forward with grave doubts. It is the end of the fruitful period of her existence, and like puberty is not a momentary or a single event. It comes on gradually, extending over a period of two or three

years. It includes the time when menstruation begins to be irregular, gradually diminishes and finally ceases altogether. It presents certain signs, as congestion of the head. Causes a red face, headache, bleeding at the nose, catarrh of the stomach, acne upon the face burning and tingling of the body (hot flashes), backache and neuralgia, tremor in the limbs and palpitation of the heart. The temper is subject to quite sudden changes and she may become delirious and even insane: certain anatomical changes take place as atrophy of the genitals. Most women become stout, sometimes gout makes its appearance. I have noticed Pyorrhoea is most prevalent in women after this period. This is a condition where there is not much to do except to be generally sympathetic and solicitous as regards their comfort, while under our care.





Second District Dental Society.

February Meeting.

A meeting of the Second District Dental Society of the State of New York was held at the residence of Dr. Charles F. Ash, No. 160 Park Place, Brooklyn, on Monday evening, Feb. 27, 1899.

The meeting was called to order at 8 o'clock by the president, Dr. Kraemer, and the minutes of the previous meeting were read and approved.

Dr. Dwight L. Hubbard presented the essay of the evening, entitled "A Practical Consideration of Some Forms of Stomatitis."

Discussion.

Dr. Uan Cott. Chambers that I think perhaps it would be well to speak of, especially at the present time, when we see in all our cars and everywhere in public places the order from the Board of Health against expectoration. I think that we as dentists ought to impress upon our patients, especially children, the importance of breathing through the nose.

These air cavities are not only for making the head light—not only to give resonance to the voice, but to warm the air and keep it moist, so that in carrying it to the lungs there is no chill, as there would be in breathing through the mouth.

In the matter of diphtheria, I heard of a case recently which was quite puzzling. A spot occurred on the inner portion of the cheek, and they were puzzled to know whether it was syphilis, diphtheria, or canker, and the only way to settle it was by bacteriological examination. In this particular case there was great elevation of temperature. Of course it was probably expulsionary. I would like to ask also whether I understood Dr. Hubbard when he spoke of nitrate of silver. In one case he

said twenty grains to the ounce, and in one case I think he said 20 per cent.

Mr. President, I am not a stomatologist; I am pust a plain dentist, and I do not feel competent or inclined to discuss stomatitis as it has been presented here. We have had a recitation of facts, and how can we dispute them?

Ts Disease

Rereditary?

But there is one thing I would like to speak about, and that is heredity. I did not know there was any physician who believed so much in heredity as the essayist. How far forward or backward shall we

go in heredity? I remember in a discussion about irregularities, one man got up and said he never undertook to treat such a case as that which was under discussion. He could regulate it, but he could not keep it regular unless he could treat the ancestors. The essayist replied: "If you treat the children, you treat the ancestors of coming generations."

When we come to think a minute about this idea of heredity, I think we can bring the *reductio ad absurdum* method of argument to bear upon it. Which way shall we look, forward or backward? If we start with a couple who are married, and look forward, we see that they have three or four children; these marry, and each have, say, five children; these five marry, and each couple have two, three or more children; each of them marries, and so on, until in the fifth or sixth generation we may have a descent covering hundreds.

I knew a woman once who was still living in the place where she was born, who had two hundred descendants living within twenty miles of her. Now if that woman had been tainted, how many of the descendants would have been tainted?

In the same way, looking backward, how far back shall we ask our patient to inherit from these people? There is scarcely any disease imaginable that we would not all have, if there is such a thing as has been mentioned. For my part, I do not believe there is anything in heredity beyond a possibility of inheriting the physical form of our own parents, but the physical infirmities of our own parents, never; not in any case do I believe that, unless the disease is visibly present at birth.

The natural impetus of every individual in the world, whether it be animal or plant, is for the preservation of the species, and the preservation of the species demands an advance towards the ideal. We know that the human being is so safe-guarded, as I am informed on credible authority, that degenerates in the third generation become sterile. They do not further reproduce of their kind, consequently there is a protective law against heredity of diseases. The most that I am willing to admit about heredity is this: Every individual is given a vital resistance, and if at the

moment of conception the parents are in a depleted physical condition—a diseased physical condition—I can conceive that the embryo would have a lessened vital resistance. If the infant, when born, is placed in an environment where the particular disease for which it has a lessened vital resistance is present, that child might be called "prone" to the disease, but take the child from the environment and place it in a healthy atmosphere, and this lessened vital resistance will become a full normal vital resistance, and any attack of that disease in the future would merely be a misfortune, and would not be traceable to hereditary influence, even though it proved fatal.

Before sitting down I want to say that the only disorder I know of in dentistry that has been claimed by some to be hereditary, is irregularities of the teeth. I am coming to believe that the etiology of irregularities must be bereft of heredity. I can show in my cabinet some examples of models of irregularities that come to me again and again, until there is absolutely a type of that irregularity, and I believe that if we had in the museum in Washington, or anywhere else, thousands of models of irregularities, they could all be divided into a few typical classes. Studied by that classification, we could see at once that an irregular set of teeth is merely an accident of dentition, and not a result of heredity. When Dr. Hubbard gets up again I wish he would enlighten us on the subject of tincture of aconite and iodine. He did not tell us what we could use when he took that combination away from us.

Dr. Jarvie. per, but I do not feel at all inclined to discuss it tonight. I got considerable light on some points I was
not very clear about. I should hardly be inclined to agree with the last
speaker. I believe in heredity, but I believe that tendencies are inherited,
and the development takes place in the individual, whether it be on account of special environment which would tend to develop that disease, or
that tendency whatever it may have been, mental or physical, or whether
the environment be such as to strengthen the inherited defect, and so
overcome the natural tendency one way or the other; I do believe in
heredity, both in the mental and the physical, and the temperant.

Dr. Ottolengui.

I would like to ask Dr. Jarvie if he ever heard of an infant having an inherited disease at birth?

Yes, I think it is quite common. I would suggest to Dr. Ottolengui in his researches, in this subject of heredity, that he read "Elsie Venner," by Oliver Wendell Holmes. I think that he works out the theory of heredity most beautifully. It is one of his early works, but it is an interesting book.

Dr. Ottolengui. laws, even if the romancer be a physician. In a novel written by one of the most prominent gynecologysts and surgeons in Brooklyn, a woman gives birth to a child with a birth mark supposed to result from a frightful episode between the mother and a lover she had parted with two years prior to her marriage to the father of the marked child. When medical men write novels they frequently become romancers indeed.

I have very little to say, gentlemen, inasmuch as the subject rather drifted to heredity. I cannot see that Dr. Ottolengui disagrees with me, nor I with him. What I mean to convey when speaking of the subject of heredity is the term that I said I did not want to see eliminated from the dictionary—dyscrasia, diathesis, which means a tendency toward or a leaning to something which is in the past, influencing that which is in the future. I do not myself believe that a disease is directly inherited unless the force of it in the parent should be strong enough to convey it directly to the child. In that way you may get a transmission of all the tendencies which are certain to produce that disease in the child.

Let me give an illustration of that tendency. I have two in my own case which are very striking. My grandfather, father and myself have on the retina of the left eye a deposit of crystals which is an oddity. I do not use my left eye at all. These crystals in the retina are almost unknown to occulists, especially when you find them in three generations. My grandmother, mother and myself never had wisdom teeth. I may get them when l am seventy years old, but I have only twenty-eight teeth and retain every one of them. I never have said that one defect was directly transmitted to another. It always has seemed to me, Dr. Ottolengui, that my own case was a pretty fair illustration of the direct transmission. I do not believe in the indirect transmission of a specific tendency to a disease; for instance tuberculosis from the tubercle bacillus, which must be taken into the system in some way. Inflammation of a gland or synovial membrane as in the knee-joints, contains a bacillus that is said to be scrofulous or has a tendency toward it. That is all I mean to say, Dr. Ottolengui. I agree with you fully, on the ground that these things are not directly transmitted. I believe that the Almighty Creator has thrown around us things which prevent and absolutely make impossible the transmission of real disease, and He has done it not only in the old law, as a means to an end, but in the elimination from the human race of certain things that are bad and abnormal to the system. I believe in the tendency in Nature to climinate that which is evil. I am one of the optimistic ones, who believes that the world is growing better every day, vet I do believe in a moral and mental and physical heredity, using the words dyscrasia, diathesis—a tendency tq, a leaning toward.

As to the tincture of aconite and iodine, I do not know of anything any better.

Central Dental Association of Northern New Jersey.

March Meeting.

The president called the meeting to order. Dr. Meeker reported that owing to sickness Dr. Louis C. LeRoy, of New York, the essayist, could not be present; also that he had requested Halsey M. Barrett, Esq., the counsel of the New Jersey State Dental Society, to be present, and speak to the Society concerning the decision of the Court of Errors in the case of the New Jersey State Dental Society against the Dentacura Company. The president then introduced Mr. Halsey M. Barrett, who addressed the Society as follows:

Mr. President and Gentlemen of the Central Dental Association: It requires a great deal of confidence and assurance for a lawyer to take the place of a dentist in making an address to this Society, and if I were not so well prepared I should feel that even the wounds in the side that come from speaking on the spur of the moment, would not serve to excite me to the proper pitch.

With respect to the decision in the Dentacura case

Society Rights in Papers Legally Established.

Vice-Chancellor Stevens granted a preliminary injunction restraining not only the Dentacura Company, but anybody—its officers, agent or employes—from making use in any way of the report presented by Dr. Watkins as chairman of the Committee of

the State Dental Society. You will be interested to know that in all the jurisprudence of England and the United States, there is not a single case on record establishing the principle of the proprietary right of a society in the official written report of its committees.

Now that the case has been decided, I violate no confidence in telling you that it was one of considerable difficulty, chiefly from the lack of precedents. The principle had always been recognized in the legislation which is known as the copyright legislation, but there had been no decision of any court in any English speaking country, nor in any foreign country

which had been adopted by our English speaking countries, establishing the proprietary right of a society in the reports of its committees.

After I had given the Society the opinion which I did. I felt confident that the matter could be carried to a successful termination, but I realized then and with pride, that it was to be an important case, and one that would establish for New Jersey at least, an important principle whichever way it were decided, and it was a matter of no small satisfaction to me that I had been asked to represent the Society in that litigation. When I presented the papers to Vice-Chancellor Reed. he said to me: "Don't you think that you are asking from the Court of Chancery a great deal in seeking an injunction in a case like this?" I said I did not, but I thought I was asking just what the State Dental Society was entitled to receive. He asked me on what ground I put the application, and I replied, "On the ground of literary property." Then the Vice-Chancellor inquired of me if that claim had ever been suggested before, with respect to the ownership of the report of a committee and I replied, "No. sir; but this is an opportunity for you and the Court of Chancery of New Jersey to establish that principle, and if you will grant the injunction which I ask, I have no doubt that we shall be able to hold it." Vice-Chancellor Reed took the papers and said he would consider the matter during recess, and besides other things I gave him a copy of the opinion which I had given the Society. After recess the Vice-Chancellor said that he would give me the injunction; that he thought it could be put upon the ground of literary property. The rule to show cause was made returnable at Jersev City, and on the return day Vice-Chancellor Stevens was sitting, one of the ablest gentlemen who has ever adorned the Equity Court of New Jersey; he has a number of years to serve, and I hope that he will continue to serve throughout his entire life. (Loud applause.)

The Dentacura Company was represented by my friend, Mr. Edward A. Day, a very competent and skilful lawyer. We had to rely entirely upon the case made by our bill and affidavits, while the other side relied on such affidavits as they chose to prepare, and Mr. Day had a long affidavit made by Mr. Lathrop, a very plausible document, which seemed to meet and answer the case presented by the Dental Society.

I was somewhat discouraged in the first ten or fifteen minutes of my argument by the idea that Vice-Chancellor Stevens was against me; his feeling seemed to be that the Dental Society had parted with its right to control this report. However, I felt that the case ought to be won and it would be my fault if it was not, so I reiterated and urged my argument with all the force of which I was capable, and when I concluded my argument I felt that unless Mr. Day could undo what I had succeeded in establishing in the Vice-Chancellor's mind, the injunction was pretty sure to

issue. Vice-Chancellor Stevens did grant an injunction, and presently I will read you a part of his decision, stating the substance of the principle involved. An appeal was taken to the Court of Errors and Appeals, where the case was argued, and a decision announced some two weeks ago. There are sixteen judges of the Court of Errors, but the Chancellor does not sit on any appeals from the decision of one of the Vice-Chancellors; my impression is, however, that every one of the other fifteen judges was present, and the court unanimously affirmed the decision of Vice-Chancellor Stevens, and did it in a way most complimentary to the Vice-Chancellor, so that when the decision is printed in the reports, it will read, "The decision of the Vice-Chancellor below in this case is unanimously affirmed, for the reasons stated by the Vice-Chancellor in his opinion, and this Court of Appeals adopts his decision as their decision and their opinion in this case." (Loud applause.)

And now I will read you the last page of Vice-Chancellor Stevens's decision. The chief defence on the part of the Dentacura Company was that the meeting at which this report was read was not an exclusive meeting of the Society, that many of the public were present; Mr. Lathrop swears that there were some hundreds of people present who were not members of the Society. Now I do not know whether that is so or not, but I stated to the court that I had known Mr. Lathrop since he was eighteen years old, and that I thought him utterly incapable of distinguishing between units, tens and hundreds. (Loud laughter.)

Vice-Chancellor Stevens says:

Opinion of the Vice-Chancellor.

"That the manuscript and its contents were, in the first instance, the exclusive property of complainant, does not, therefore, admit of doubt. The question in dispute is whether they have been so published as to

have become the property of the public. As defendant (The Dentacura Company) does not pretend to claim by private transfer to itself, it must show title in the public of which it is a member. The burden of proof is on the defendant. It must show affirmatively that what was once the complainant's has now become common property. In this I think it has failed. Mr. Lathrop says that the report was read in the presence of the public, and that many persons not connected with the Society were present. But who those persons were, and under what circumstances they attended, does not appear. They may have been, consistently with the facts stated, exhibitors, who paid a fee, in which case they would stand much in the position of persons admitted to a theatrical performance or a lecture on payment of a fee. In such case there is no dedication of the play or lecture to the public generally. (Tompkins v. Hallock, 133 Mass., 32, Palmer v. Dewitt, 47 N. Y., 32; Abernathy v. Hutchinson, 3 L. J., Ch. 209, Caird v. Sine, 12 App. Cas. 326.)

There is no averment that a public meeting was called to hear the

report read.

There is no averment that the general public were by any formal act of the Society or its officers invited to be present. All that is fairly deducible from Mr. Lathrop's statement is that at the regular annual meeting some persons not members were not excluded from its sessions; in other words, that its doors were not closed upon them."

Exactly the point we made in our brief, that there was not any exclusion. Then the Vice-Chancellor cites an English case of a professor in Oxford University whose lectures were cribbed. I do not need to cite that case here; it establishes the principle in connection with that matter.

And then the Vice-Chancellor goes on to say:

"It seems to me that the case in hand presents a situation similar in principle. The report was read not to or for the benefit of the public generally, but to and for the benefit of the Society. It was 'accepted' not by the public, but by the Society. It was a professional essay intended primarily for professional men. The views embodied in it might or might not be approved by the members of the Society at large. Now to assert that the mere reading of this report to the Society by the committee (and they had no authority to report to any one else), in the presence of certain outsiders, was a dedication of it by the Society to the public, seems to me to be unreasonable.

"The members of the Society would not as men imbued with the scientific spirit be likely to stamp with their approval views or assertions which they had not as yet had the opportunity to test or consider. The circumstances of the delivery and the object in view rather rebuts than sustain the inference of a dedication. Furthermore the Society did not approve the report. All they did was to accept it for the purpose of putting it on file and then to discuss it. They came to no determination as to its merits. They neither approved nor disapproved it. How then can we efairly infer from what took place an intention to make public, with a view to the public benefit, ideas and conclusions which they were not then prepared to indorse. The mere presence of auditors is not, according to the cases, a decisive test; if it should be held to be, then any person present at a corporate meeting by the mere suffrance of the corporators, could thereafter publish its proceedings against their will for his own pecuniary profit, if he could only in some authorized way get possession of a copy of them, or could by an effort of memory recall them. Taking the facts to be as we find them stated in the affidavit of Mr. Lathrop, proof of dedication is therefore lacking. But more than this, Mr. Lathrop swears in a subsequent passage that he has been informed 'That it was the intention of the officers of the said Society to disregard the recommendations of the said committee in its said report, and not at any time to publish said report or any extracts therefrom relating to Dentacura * that this deponent has endeavored to obtain permission from said Society to quote from said report, but that the officers of said Society refused entirely to permit this deponent and his said company to make use in any form of said report, even so far as to announce that in said report Dentacura was recommended.' Here is affirmative evidence of an intention not to publish.

"The complainant is entitled to a preliminary injunction. I may

add that the case is now before me on *ex parte* affidavits only, and that all that is decided is that on these affidavits defendant has failed to show a title in himself or in the public."

As I have said, the decision of the Court of Appeals was unanimous, and Mr. Day has informed me that the Dentacura Company will not go on with the case. The present position is that a preliminary injunction was granted by Vice-Chancellor Stevens, that the Court of Appeals sustained the Vice-Chancellor's decision, and the defendant would have a right, if it chose now, to file an answer and have the case tried on its merits. But I am informed that will not be done; its merits have practically been decided in this case; there are no merits excepting such as were brought into the jurisdiction of the court on the bill and affidavits, so that there is really nothing to try which has not been tried, and the Dentacura Company have abandoned any idea of further contesting the case, and they are going to try and get all the advantage they can out of the advertisement of the suit.

That is the situation, gentlemen, and I feel it is a matter that I can congratulate you all upon, because of the course which you have taken from a high-minded professional pride as to your own right. This was a suit, the winning of which, would add only to the dignity of the Society; you were not suing for money, you were not asking for damages; you had nothing to gain in a pecuniary sense, you had to bear the expense of the litigation. The Society went into this suit for the purpose of defending its property right in its own official reports, and this has been done. There is no weakness in this decision, it is for you in all particulars and a principle has been established which must be of great service to such bodies as this.

One of the arguments I used in my brief was this: Supposing the New Jersey Historical Society, which is in the habit of having submitted to it, either biographical or historical articles prepared for it by its members at its request should have such articles presented to it at a meeting at which they had taken no pains to exclude the public. Could it be said that any gentleman who had submitted an article of that character had thereby lost his right to have it copyrighted or to have copyrighted a larger work if it should afterwards be incorporated in such? That is a fair illustration of the character of your rights. You have vindicated the principle of the right of a literary or professional Society to the exclusive and absolute control of documents whether essays or reports presented to it by its members or by its committees, and you have established the fact that until you—not the writer, not the committee—until you, the Society, which has received and accepted these reports, officially authorize their publication, they are yours against all the world. (Loud applause.)

Discussion.

Dr. Stockton.

Dr. Stockton.

Dr. Stockton.

President, and also the Society, on having secured so able a counsel in this case, as to present a case the like of which has never come to our courts before, and the decision of which will be a precedent for all time. I have always thought that the report of the committee was not in any sense a scientific report such as should have been made to this Society. I do not believe it possible for any committee to have prepared such a report in the time given that committee or without considerable expense, and no bill for expense has been presented by that committee. If a scientific report was made then Dentacura should have been compared scientifically with other proprietary medicines mentioned in the report.

One moment; I would like to call the doctor to order, and ask that when he speaks of the Society in his remarks he would name the New Jersey State Dental Society, as this is the Central Dental Association of Northern New Jersey.

They are so intimately connected that it does not seem to make much difference which is which.

To have made a scientific report such as that report claimed to be, would take at least three months; no competent chemist would have made the necessary examination and report that was worth anything, for less than a thousand dollars. If the report was worth anything, comparisons and germ cultures should have been made. Suppose that Dentacura had been compared with listerine, for instance, germ cultures should have been made and the ability of the two to destroy bacteria, compared. Therefore I have taken the position that this is not a scientific report and therefore of no practical value. I am delighted, however, to know that the Vice-Chancellor has arrived at the conclusion which seems to be so eminently right that we have, until we choose to make it public, the right to withhold the reports of our committees, and I judge that the view was taken that this report was not a scientific one and was not worth anything.

I should like to know, however, whether this decision prevents the Dentacura Company from going into Illinois or any other State than New Jersey and advertising the report of the committee in the *Digest*, for example, or any other Western magazine.

Dr. Cuckey. It gave me the most unbounded pleasure to hear the report of Mr. Barrett. It has been the one aim of my life from the time that this trouble began, until the announcement of the decision of the Court of Errors, to carry this case

along the lines on which it was begun to its finish and I was as absolutely certain of the finish at the beginning as I am now. I was fortified with Mr. Barrett's opinion, I was fortified with the opinion of Vice-President Hobart, and with the opinion of the counsel of the Consolidated Dental Manufacturing Company, so I was not surprised when the Vice-Chancellor granted the preliminary injunction, nor when the Court of Errors sustained it. I feel that the State Dental Society has done that which will raise it higher in the esteem of the dental profession throughout the world than any other act in its whole career. Hereafter all societies and incorporated associations will feel, no matter what their field may be, that the proceedings of their societies and the reports of their committees are theirs until they choose to publish them to the world.

The editor of the Paterson Morning Call told me he thought Vice-Chancellor Stevens's decision was wrong, and he published an editorial on those lines. After I heard of the decision of the Court of Errors I saw the editor of that paper, and, like a fair, square man, he not only admitted his error, but, in publishing the decision, added a little editorial at the bottom, admitting that he had taken a mistaken ground at the be-

ginning.

This victory will carry us a good deal further perhaps than a great many here anticipate, and I can see in the future one of the finest dishes of full grown crows set out before the National Association, which passed a resolution of censure upon the New Jersey State Dental Society based upon a short excerpt from a little report in the Montclair Times, backed up by the testimony of a single member of the State Society, who appeared as an individual before it. When the time comes for that National Association to meet, if the gentlemen who were foremost and most anxious to have that resolution of censure passed upon a body of earnest men, do not of their own accord rescind what they did last summer, they will find that there are hornets yet alive who will follow them so closely and so tenaciously that they will only be too glad to accede to the request, or the demand, if such be necessary, to rescind that resolution and to accord to the New Jersey Society, the credit of doing what they did in the confidence that it was honestly and fairly done.

I feel that the Society has taken a stand that it is absolutely and positively without any desire to vary or to quibble about, and it is only just and right that every individual member of this Society who goes upon public record should be one of us with all his force, and I therefore offer this resolution:

Whereas, the ethical integrity of the New Jersey State Dental Society has been questioned by the profession at large and the National Dental Association in particular, by reason of the report of a special committee

appointed by said Society regarding dental prophylaxis; and,

Whereas, the said committee having in its report thoughtlessly and carelessly recommended a certain dentifrice, we, the members of the Central Dental Association of Northern New Jersey, do declare that such recommendation was ill-advised and unwarranted; that it was contrary to the accepted professional code and contrary to our individual conception of professional relation to dental commercialism; and

Whereas, the courts of our state have sustained us in our contention

as against said Dentacura Company, be it

Resolved, That it is the judgment of this, the Central Dental Association of Northern New Jersey, that all members of this association, who have given individual indorsements of said Dentacura preparation, be required to recall the same and use every effort to have said indorsements removed from the public prints.

(After a full discussion a vote was taken on the resolution of Dr. Luckey and the same was unanimously adopted.)

In answer to the question of Dr. Stockton, I will read the language of the order for injunction, and the injunction itself follows that language exactly; that order is as follows:

"The complainant having filed its bill in this cause praying an injunction against the defendant, and the court having granted a rule to show cause why said injunction should not be granted; and the said application against the defendant, and the court having granted a rule to show thereto, and upon affidavits presented by defendants in opposition thereto. in the presence of Halsey M. Barrett, of counsel with the complainant, and of Ed. A. Day, of counsel with the defendant; and the court having considered the matter and being of the opinion that the complainant is entitled to a preliminary injunction restraining the defendant company, its officers and agents, from printing, publishing or circulating all or any portion of a certain report made to the New Jersey State Dental Society at its annual meeting in July, 1898, by a special committee of said Society. of which Dr. S. C. G. Watkins was chairman, which report was set forth in complainant's bill, and from representing or claiming that the New Jersey State Dental Society has approved, indorsed, recommended or become sponsor for the said preparation called Dentacura; it is on this, 7th day of November, 1898, on motion of Halsey M. Barrett, solicitor of the complainant, ordered that an injunction do issue accordingly."

The injunction did issue according to that order and restrained the Dentacura Company, its officers, agents and employees from printing, publishing or circulating all or any portion of the report of this special committee, and from representing that the New Jersey State Dental Society has approved, indorsed, recommended or become sponsors for the

said preparation called Dentacura. That injunction only operates within the jurisdiction of the State of New Jersey, but it operates in such a way that it it can be shown that at any time the Dentacura Company is printing or publishing this report or any part of it, either in this state or any other state or country, or is anywhere representing that the New Jersey State Dental Society has approved or indorsed or recommended or become sponsor for such preparation called Dentacura, then we can punish them here for contempt of court no matter where that act has been done. Our jurisdiction is over the company, which is a New Jersey corporation, and that company is forbidden to make these representations here or anywhere else, and if we can show that outside of the jurisdiction of our own courts they have violated the order here, we can punish them for contempt of court, in New Jersey. The Dentacura Company is an incorporated company; the certificate of incorporation which they filed states that their principal office is in Montclair, and they are a New Jersey corporation.

Dr. Meeker.

If they place an advertisement in a Western journal that is contempt of court and we have control of them if it is circulated in New Jersey?

mr. Barrett.

If they put such an advertisement in a Western journal, issued anywhere, we can punish them for contempt of court, whether it is circulated here or

not.

This particular corporation cannot change its residence; it is not like an individual who can go over the state line and so into another jurisdiction; it is a New Jersey corporation always, and whatever they do, anywhere, which is in contempt, the court of New Jersey can punish them.

Dr. Hdelberg.

They are responsible to the court of New Jersey for all such actions.

Yes, here and elsewhere they are forbidden by a court which has jurisdiction over them as a New Jersey corporation. They were brought into court, they

had their hearing and the court has forbidden them as a corporation of New Jersey from doing those things which are embodied in the injunction.

In line with what Mr. Barrett has just said, it may be interesting to read a letter which Dr. Meeker received from Dr. Paterson, the editor of the West-crn Dental Journal in Kansas City, inclosing an advertising page from the Digest. (Dr. Luckey read the letter referred to, together with the advertisement). That was in the last issue of the Digest, nor is it the Digest alone, for the same sort of thing appears in various journals, and if I un-

derstand Mr. Barrett correctly the Dentacura Company are in contempt, and if they are, it is my judgment, my disposition, and my will that they be punished for it. (The subject was passed).

Dentists in the Army and Navy.

Dr. Meeker.

You may remember, gentlemen, that the National Association and several state societies of the United States, have taken up the subject of appointing dentists in the Army and Navy, and I move that it is the sense of this meeting that the appointment of compe-

tent and graduated dentists should be made in the Army and Navy of this country and that the secretary so report to the National Association.

I have felt for years that this was an important movement. I felt that when men were subjected to a physical examination before being admitted into the

Army, and one of the main features of that examination was the condition of the teeth, that when the government accepted them with teeth in proper condition, they should either give these men the opportunity of preserving their teeth or preserve them for them. The government does not itself provide any means by which a man may preserve his teeth and consequently the government ought itself to take care of those teeth. If an enlisted man becomes afflicted with caries and his teeth decay he goes to the regimental surgeon for relief for toothache, and he either extracts that tooth, puts in a little dressing to relieve the pain temporarily, or says that when they reach a point where a dentist can be found, leave of absence will be given long enough to have it attended to. This is inadequate. I am heartily in favor of the resolution. I understand that a bill is now before Congress looking towards the accomplishment of this.

I think a bill of this kind if introduced and car-**Dr. Richards.** ried through, would be a very great thing for the
dental profession. My preceptor, Dr. Merrill, now
of Melbourne, Australia, some twenty odd years ago, introduced a bill of
this kind, and it was a great hobby of his; he worked very hard at it and
almost procured its passage, but eventually it failed.

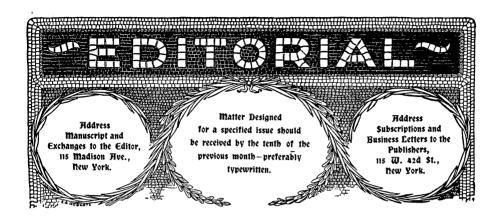
A man is just about as sick in his teeth as in his arm or anywhere else, and there is no reason under the sun why dentists should not be appointed to the Army and Navy.

I move that a committee of five be appointed. (The above motion was regularly seconded.)

I will state I had a letter from Governor's Island,
New York, stating that that part of the Army Reorganization bill providing for the appointment of dental surgeons with the rank of 1st Lieutenant had been dropped entirely, and the Army bill adopted without that section. There seems to be a determined opposition on the part of Army officials, especially the medical department, to allow dental surgeons in the Army. What we can do is rather hard to say, still there may be chance, if statistics are presented to the members of Congress and those who are in charge of the reorganization of the Army, for dentists to become a part of the army organization.

(A vote was then taken on the motion to appoint a committee and the same was unanimously adopted. The president appointed the following gentlemen as members of that committee: Drs. Luckey, Stockton, Sutphen, Iredell and Watson.)





May Colleges Advertise in the Public Prints?

A communication was received recently, which reads as follows:

"Inclosed you will find a clipping taken from the personal column of one of our newspapers. In regard to it I would respectfully ask the following question:

"Is it strictly professional for a dental college to advertise 'Free Dental Services?' If so will you explain, giving a clear distinction, the difference between a college advertising their services, stating prices, and a regular qualified dental surgeon advertising his services and also stating prices?

"I can readily see how advertising lowers a profession, but I cannot appreciate the line drawn between the dental colleges and their graduates, permitting the former and forbidding the latter to advertise."

The advertisement inclosed, is headed in large letters, "Free Dental Services," following which is the name and address of the college, and then the body of the advertisement, which read thus:

"Plates, bridges, crowns, etc., made; gold fillings and extracting, modern and most painless methods; material only charged for. In charge of experienced demonstrators. Clinics daily (except Sunday) 9 to 3."

Upon reading the above the following letter was dictated, and the stenographer was instructed to "forward that to the Dean of that college":

"We have just received the inclosed communication (copy sent) with advertisement cut from a newspaper, and shall publish it with editorial comment. I take pleasure in offering you space for a reply, giving an explanation, and, if possible, defense of the position of your college in this matter."

This letter was entirely impersonal. It was dictated in ignorance of the identity of the Dean, as time was not taken to investigate. It subsequently transpired that the Dean is a personal friend, highly esteemed. But where a principle is at stake should such considerations have sway?

The Dean did not honor the editor with a reply direct, but wrote a lengthy letter to the publishers complaining of the contemplated publication, arguing that it would be injurious and libelous to single out his college for editorial criticism.

This letter was referred to the editor who wrote to the Dean explaining how impersonal the first letter had been; that no injury to his institution had been intended; and, in fact, that the proffer of space for an explanation had been meant as a courtesy. It was furthermore pointed out that it is quite doubtful that a court would hold that it is libelous to reprint an advertisement which had appeared in a widely circulated public newspaper.

The Dean replied at some length, but the only excuse offered seems to be the fact that other colleges do likewise, and he means two of the most prominent in the country, and says besides: "I can name a dental school in your own state which has advertised in essentially the same way." His letter concludes with this paragraph:

"Let me say that I know of no college clinic which is run at a profit. Ours certainly is not, for it costs us many hundreds of dollars annually above its income to keep it going; but it is a necessary expense, for without it we could not properly train our students."

All allusion to the college by name is here omitted, because it is the large question which is to be discussed and not the particular college. The excerpts from the correspondence are introduced as pertinent to the argument, and of course give no hint as to which college is meant, as subsequent inquiry has shown that many colleges advertise.

With What Object Does the College Advertise?

Why do the colleges resort to advertising? Fundamentally to attract patients, the object thus far being the same with the college as with the quack. But the quack aims to make money. Has the college any such purpose in view? The Dean has claimed

that he knows of no college clinic that is run at a profit, mark the word "profit." The deduction which presumably he desires us to make is that as his advertising yields no "profit," it is excusable. But does not the advertisement pay, that is, is not money brought in, which even though it may not produce actual profit, yet is of consequence in that it lessens the loss?

Let us analyze the situation. The student pays a fixed sum, in return for which the college agrees to give him a dental education. To keep faith with the student, the Dean admits that it is obligatory upon the college to furnish patients in whose mouths he may "practice." Thus the clinic is a necessity not to be avoided. If patients could not be found who would pay for "materials," then it would be the duty of the college to furnish materials gratis, and thus do genuine "Free Dentistry." In that case the cost of running the clinic would be swelled exactly by the amount paid by those persons who in reply to the advertisement have their teeth cared for and pay for "materials." Thus it is shown that the clinic, being a necessity, the advertisement yields a profit to the college, by lessening its legitimate running expenses.

As a matter of fact it is quite probable that the "profits" of the college clinics depend very much upon the way in which the calculations are made. For example, in reckoning the receipts of the clinic what proportion of the student's fee is credited to the clinic account? or, on the other hand, in counting the loss of the clinic what part of the rent of the building is charged to it?

We hear always that at college clinics patients are charged only for "materials" used, yet college graduates always smile when the subject is discussed. A certain college charges from twenty-five to forty cents for amalgam fillings, and twenty-five cents a roll for gold foil, a roll being half a sheet. Is this really charging for materials only? How many colleges are making sets of teeth on rubber for a dollar?

So far then as the profit on the clinic goes the professors beg the ques-

tion when they tell us of "losses." A college has definite expenses, and two sources of income; the fees of students, and the fees from patients. If the total income exceeds the outlay there is a "profit" in the business and the clinic earns its share. In the face of the fact that the clinic is an unavoidable necessity, this is a view that would be sustained by any ordinary business man.

The Evil Influence of College Advertising.

The colleges being run entirely on philanthropic lines, and the professors all giving their time for the good of the community, for the honor, and without hope of reward, shall they be exempt from the code of ethics? Shall they be permitted to advertise?

There seems to be two chief objections. First, the bad example which the Alma Mater thus sets its graduates; second, the competition in business thus maintained by the college. As an example of the former, the following incident is instructive: Within a week a young graduate called for information as to which states he might practice in without passing an examination. A conversation with him elicited the fact that he could not obtain a position in New York without a license, and that the Board of Examiners would not meet again till the autumn. In the meantime, it was necessary for him to earn his living. He stated that he could obtain a position, if he only had his license, and admitted that it was in an advertising office. Asked why he would lend his assistance to the quacks, he replied:

"I cannot get a position with the ethical men, and I must live; besides, my college advertises; why, then, should I hesitate?" Asked what institution had graduated him, he stated that he was a '98 man from the very college whose advertisement appears herewith.

The second evil is perhaps the greater one. By advertising cheap dentistry, the colleges attract many persons who could well afford to pay a reasonable fee, persons who should therefore patronize the graduated men, thus enabling them to earn a livelihood without entering the field of advertising with their Alma Mater.

If the colleges would assume the whole expense of their clinics paying for materials, and rendering services gratis to the really poor, and to none other, they would reach a class not now receiving any dental attention, and thus they would be rendering a worthy charity, while the very

fact that the services are given as "charity" would tend to lead those with means to patronize the regular practitioners. Of course this additional expense in the clinic room might compel some of the colleges to close their doors, but the profession at large would see no objection to that. As the Mikado says, "it would be a loss that is a distinct gain."

One Dean has declined to discuss this subject through our pages. Yet there can be no middle ground. It must be either wrong or right. If wrong, the offenders should be soundly censured by National Association of Dental Faculties. If right, the explanation which would satisfy the profession should be publicly made by the Deans of the advertising colleges, and we offer space in our magazine for a discussion of this subject pro and con, with special request that the college deans may give us the arguments on their side.

Two New Editors.

Some months ago, a great wave of professional pride passed over New York, the enlarging circles even lapping the shores of ethical Boston. The craft which many expected to see floated by this wave, was to be an independent dental journal: that is to say, a dental journal independent of a trade house. The weeks go by, but the launching has not yet been announced; meanwhile the projectors of the scheme should remember that editors are born and not made, and that there are only a limited number of good ones in the dental profession. Two more have been engaged to take editorial charge of dental magazines.

It is with great pleasure, we notice that *The Weekly Dentist*, of London, England, originally projected as a monthly, has been placed in the editorial care of Dr. J. Leon Williams, than whom there is no more distinguished member in our profession.

Another of our fine writers, Dr. Wilbur F. Litch, has accepted the editorial chair, and will conduct *The Dental Brief* in the future.

To both of these gentlemen we extend our best wishes for success, while to the projectors of the long-expected, highly ethical, indpendent journal, we proffer our sympathy that two of the best men have escaped them.



twenty-five dollars charging The secret being too good to keep, fraternal fellowship has led to its exposure.

painlessly

of

method

Pulps Removed Painlessly Without Arsenic.

Pulps may be painlessly extirpated (so we are informed by a correspondent who desires that his name be not published) by carefully observing the following instructions: "Take a bit of spunk of a size to nicely cover the floor of the cavity, moisten with

to us, is traveling through the West selling "a

removing

for

pulps,"

the

alcohol and then touch the moistened spunk to finely powdered eucaine hydrochlorate. Place the spunk in the cavity so that the eucaine is in contact with the exposed pulp. Fill the rest of the cavity with ordinary red rubber (unvulcanized). Apply light pressure with a ball burnisher as large as can be made to enter the cavity. As soon as the light pressure ceases to prove painful, gradually increase the pressure till considerable force is exerted. Continue this for a full minute, the entire procedure occupying from three to four minutes. Remove the rubber and spunk, and usually the broach may be inserted and the pulp removed without any pain. Where the exposure is minute it may be advisable after the first application merely to enlarge the opening thus exposing the pulp more fully, whereupon the process should be repeated. Where arsenic has previously been used the anaesthetic effect will not be so pronounced as in the cases of fresh pulps. Where the medicine can be well confined within the cavity the result will be best. It is essential that there should be actual exposure of the pulp, so that the eucaine may be in contact with the pulp itself."

Time has not permitted a personal trial of the method, but other experiences with eucaine engender faith in the above proposition, and it is thus hastily published that our readers may not be mulcted by the gentleman who is vending the secret. It is of interest to note that this is a variation of what Dr. Morton calls "pressure anaesthesia," the pressure in this instance being of a purely mechanical nature. Those of our readers who try this, are requested to report their experiences for publication, being sure that the directions are fully followed.

Dr. Bonwill Will Clinic for Five Davs. Last year while abroad Dr. Bonwill's clinics were received with marked interest in many cities of Europe where he visited by special invitation. He has now agreed to give a series of clinics during the convention of the American Medical Association at Co-

lumbus, Ohio, from June 6 to 11. This announcement should attract a large attendance and his clinics will undoubtedly make the dental section prominent.

Protection for Engine Kandvieces. Dr. J. Masters, of Manchester, England, makes the following useful suggestions: "To prevent saliva and other fluids from getting into the handpiece of the dental engine while preparing teeth either for crowns or for fillings, but especially in the former

case where the use of corundum stones necessitates frequent dipping into water, I invert one of the rubber cups on the shank of the instrument, the open side thus being towards the handpiece. This absolutely prevents moisture or debris from finding its way into the handpiece."

ITEMS OF INTEREST

Empiricism versus Science. Dr. Leon Williams's paper, entitled "Which Shall It Be, the Empirical or the Scientific Method?" read at the January meeting of the New York Odontological Society, and published in the *Cosmos* for the January meeting of the New York Odontological Society, and published in the *Cosmos* for the January Market of Send up the following the send up the send up the following the send up the sen

March, is bearing fruit. It has inspired Dr. Lawshe to send us the following lines:

She Will Slay the Dreaded Night.

By Allison R. Lawshe, D.D.S., Trenton, N. J.

Who hath known the fevered writhing; who hath suffered through the dark;

Who hath lain long nights upon a bed of pain:

With shadowed hope; with darkened soul; wild-eyed and weary-worn; Who hath longed for daylight's balm and cheer again?

Then the radiant Day, all hail her!
All hail the glorious Bright!
She will fight the foe of Darkness—
She will slay the dreaded Night.

Who hath known the dark-night groping; who hath stumbled; who hath strayed;

Who hath blundered blindly onward in the gloom:
With bruised limbs, sick heart and sore-strained, aching eyes;
Who hath searched the dark for morning's earliest bloom?

Then the radiant Day, all hail her!
All hail the glorious Bright!
She will fight the foe of Darkness—
She will slay the dreaded Night.

Who hath seen the new day blushing; who hath heard the robin's hail; Who is quick to read the promise of the morn:

Who hath caught the new unrestness and hath shaked his eyes from sleep; Who are blowing Forward, all, with valiant horn?

Now the radiant Day, all hail her!
All hail the glorious Bright!
She does fight the foe of Darkness—
She does slay the dreaded Night.

Occupation Cax in Many Cities. In our last issue a correspondent complained that in Kingman, Kansas, a tax was levied, and inquired whether or not such a tax was charged against dentists elsewhere. Dr. Thomas A. Mayhew writes: "For the benefit of my brother in Kingman, Kansas,

I write to inform him that in the county seat of his neighboring county, Wellington, dentists have been taxed five dollars annually for the past ten years." Dr. J. Calder writes: "In Butte, Montana, the city levies a tax of two dollars and a half, and the county six dollars quarterly, making a total annual tax of \$34. In addition to this dentists are made to serve on petit juries." Another correspondent informs us that Bay St. Louis, Miss., exacts a tax of five dollars per annum, while the state collects ten dollars additionally.

Dictionary Definition of Glycerol. In reply to Dr. W. O. Robinson (page 222, March issue), Mrs. J. M. Walker writes as follows: "The Century Dictionary definition of Glycerol or Glycerole reads: (1) Same as glycerine. Glycerine is the common form but the termination—ol—is prefer-

able, denoting an alcohol, while—in—is reserved for glycerides, glucoides and proteids."

Success with Difficult Operations.

Dr. Gustavus North, A.M., D.D.S., Cedar Rapids, Iowa, sends the following contribution:

"We are sometimes called upon to perform operations which ordinarily would not be considered practicable. The following cases were operated upon

with but little hope of success. It was necessary to give relief even at the risk of a loss of a tooth.

"A day laborer about forty-five years of age came to my office with a left superior cuspid severely aching; after destroying and removing the pulp in the usual manner, the pain still continued with the tooth sensitive to touch. I found after treatment that the medicine did not reach the point

of disease, and the only relief was by local treatment, and that only for short duration.

"After thoroughly studying the case I found the root curved almost at a right angle at the apex. I could not force an opening through the root with the finest nerve instrument. The pericementum was very much inflamed. Failing to obtain relief by the usual root treatment, I concluded to try the following: By drilling a small hole at the angle or curve of the root with a fine cut burr, being careful not to cut or wound the root membrane, the tooth was then treated, and in a few days filled successfully.

"Another case similar to the above, was that of a liveryman, aged thirty-seven years. The tooth was a right superior cuspid; the root near the apex was curved and an opening could not be obtained; local treatment gave but little relief. A small opening was cut through the root, as in the above case; the tooth was then treated, and in a few days filled without the slightest discomfort.

"In treating cases of this character care must be taken not to injure the root or wound the membrane; the filling must not pass through beyond the opening and press upon the soft tissue."

As we go to press we learn with regret that on the evening of April 25 the residence of Dr. Chas. A.

Robbed.

Meeker, Newark, was entered by burglars, who opened his safe, and robbed the Doctor of cash and valuable jewelry, including the treasury funds of the National Association of Dental Examiners, and also of the Central Dental Association. Among the jewelry was the well known emblem of the Central Society, a gold hornet pin. Should any one offer to dispose of this pin he is the thief, as its legitimate possessors would not part with it at any price.





Dr. J. P. Geran.

Resolutions Passed by Second District Dental Society.

Since our last meeting we have been called upon to mourn the death of one of our most honored and esteemed associates, Dr. J. P. Geran, of this city, who died on the 28th of March last.

He had for many years been an active and helpful member of this society, and by his many noble qualities had greatly endeared himself to us all.

A staunch friend, a generous, high-minded gentleman, he attracted all who knew him; a skilful and accomplished member of his profession, he justly acquired and held the confidence of the community, and it is not too much to say that by his unselfish devotion to the interests of his patients, calling for such unremitting work as he gave, his life was undoubtedly shortened and we are now called to mourn his untimely death in the fullness of his powers, ripened by successful practice and long experience.

It is fitting that while our hearts are saddened by grief for his loss, we should at this time hasten to place upon our records this tribute to his manly worth, and to take to ourselves the lesson of his unselfish life and high example.

Dr. C. R. Medd.

Dr. T. R. Medd, whose death occurred December 28, 1898, at Colfax, Iowa, of paralysis, was born September 27, 1849, in Dane County, Wis.

He studied dentistry with Dr. Wells at Sparta, Wis., going to Owatonna, Minn., in 1874, where he continued in practice until the time of his death. He graduated from the Philadelphia Dental College in the class of 1884.

Dr. Medd was married to Mrs. Margaret A. McAulay in October, 1898, who survives him.



Furnaces for Firing Porcelain.

Editor of ITEMS OF INTEREST:

Dear Sir—I feel called upon to criticize an article in the last issue of ITEMS OF INTEREST dealing with the subject of gasolene furnaces.

The writer, Dr. Sternberg, of Chicago, purporting to render a valuable service to the profession, by acquainting them with what there is to be known on the subject, misrepresents certain facts to an extent that can but mislead the credulous reader. I have reference more particularly to the allusions made in the article to the baking of porcelain.

The statement that any one can successfully fuse the higher fusing bodies, generally used, in a furnace made in the manner he describes and by the heat of a \$2.50 plumber's torch, must be known by all who have had experience in this work to be ridiculous.

There is nothing in prosthetic dentistry that demands more delicacy of manipulation than does porcelain in the process of fusing. Not only must an intensely high heat be generated, but what is equally as important and much more difficult to be attained, especially where single muffles are used, is absolutely perfect combustion. To construct a gasolene burner, and a furnace which meets those requirements is extremely difficult, as many who have attempted it will attest.

Dr. Sternberg's remarks on the subject of cast aluminum work, while no doubt they will be indorsed by some who like him, have had ill success with these dentures, yet, will doubtless not be accepted as they would seem to have been intended, as final and conclusive condemnation to abandonment. Fortunately in the dental profession there exists a preponderance of men who are too broad minded to condemn a thing, and call it "an absolute failure," when they in a couple of attempts have failed to make it a success. The other portion is not built upon so progressive a plan as to bear an occasional setback in efforts to improve upon existing conditions, without collapsing. Let this portion stick to their rubber work, while the work of substituting for it metal, is being furthered by their brother practitioners less susceptible to the depressing influences of an occasional disappointment.

R. C. Brophy.

Chicago, April 20, 1899.

Pulp Mummification.

Editor of ITEMS OF INTEREST:

Dear Sir:—From your note attached to Dr. Soderberg's paper on pulp mummification in the April number of ITEMS OF INTEREST, I am convinced of the vital interest which the profession takes in this most important question. I beg to call the attention of the readers of your esteemed journal to the masterly treatise of Dr. Boennecken, of Prague, who has made a special study of pulp mummification. The reports were originally published in the Oesterreichirch-ungarische Vierteljahrrchrift fuer Zahnheilkunde, January, 1898, and 1899. A digest thereof is found in the Ohio Dental Journal, October, 1898, and April, 1899.

Dr. Boennecken uses a paste composed of:

Cocaine,

Thymol aa 1.0 (grs. XV).

Mix very thoroughly and add:

Sol. Formaldehyde—40 grs. gtt. X.

Zinc oxide —, 2.0 (grs. XXX).

Make into a paste.

The doctor used this paste in the first year in five hundred cases with no failure, and last year again with the same success (number of cases not mentioned).

Since 1896 I have tried to make myself acquainted with the action of formaldehyde upon the pulp, and I embodied the results of the experiments in a paper read before the St. Louis Dental Society. (Published Dental Review, July, 1898). From longer observations, my views in regard to the action of formaldehyde have somewhat changed since then. Today, I do most sincerely believe with Dr. Boennecken that: "the direct action of formaldehyde vapors upon the inflamed pulp does not cause a restitution of the process of inflammation; nay, on the contrary, a coagulation-necrosis or death of tissue will result." For this reason, formal-dehyde cement used in capping pulps will cause, sooner or later, the death of the pulp.

As a mummification agent of the pulp-remnants in partial extirpation, formaldehyde in combination with thymol is superior to any other drug mixture known at present. Miller's demands for a pulp preserving agent (see Soderberg's paper) are well covered by such a mixture, and by using glycerine as a vehicle for making a paste.

- I—These vapors of formaldehyde which are set free in the pulp canals are superior to any other antiseptic.
 - 2—Formaldehyde mummifies animal tissues very rapidly.
 - 3—The ingredients of the paste will not discolor the tooth.
- 4—The thymol component of the paste will sterilize for a prolonged period. It will take weeks before the thymol enters into solution and then it is a very slow process.

The obtunding property of the thymol is increased by the addition of the cocaine. The paste which I now use gives entire satisfaction as a pulp mummification agent. It consists of,

Cocaine hydrochlorate — grs. X.

Thymol,

*Formaldehyde, dry (paraform), aa grs. XX.

Zinc oxide, grs. XL.

Glycerine, q. s., to make a paste.

The cocaine and thymol should be triturated first, thus becoming paste-like spontaneously. The paraformaldehyde and zinc oxide are added successively, and finally the glycerine, of which very little is needed.

For convenient use, I have put the paste in collapsible tin tubes fitted with screw caps. Respectfully, H. Prinz.

St. Louis, Mo., April 12, 1899.

An Open Cetter.

To the Members of the National Dental Association:

From letters received, I find that the impression prevails that I—as Assistant Recording Secretary—am supposed to be in a measure responsible for the non-appearance of the 1898 volume transactions of the N. D. A.

In justice to myself, I take this method of saying that the only portions of the work for which I am individually responsible—viz., the "Minutes of the Omaha Meeting," and the "Section Organization"—were completed at an early date, but—by instructions from headquarters—were held by me until called for by the business manager of the S. S. White Pub. Co., which was not until December 15, proof sheets of the same having been mailed to me January 20.

^{*} The paraformaldehyde is to be had from Schering & Glatz, 58 Maiden Lane, New York.

All other matter pertaining to the volume was, by instructions of Dr. Crouse, Chairman Ex. Com., N. D. A., transferred by me to Dr. Cushing, Recording Secretary.

The package containing the stenographer's transcript of the discussions was not received until October 11, and was transferred unopened to Dr. Cushing, by whom all editorial work was done.

With the transfer of all documents, in October last, my responsibility ceased. Respectfully, WM. ERNEST WALKER,
Asst. Rec. Sec., N. D. A.

Cement for Porcelain Inlays.

Editor of Items of Interest.

Dear Sir:—Having had something more than ten years' experience in the inserting of porcelain inlays—high fusing body with platinum matrix—I have perused with interest the various articles that of late have made their appearance in your journal.

In the course of my experience with this work, though I often have the inlay precisely matching the tooth in shade before setting—so exactly in fact, that no person at two or three feet distance, without previous knowledge of its position, could possibly detect it—so far I have been unable to obtain a cement that will not alter the appearance of the inlay to such a degree as to prevent perfect continuity of color; however, my most intelligent patients, with full knowledge of this, much prefer the porcelain inlay to a large and conspicuous filling of gold.

If there is a cement known that will not alter the shade of the inlay, I should very much like to hear of it. This to my mind is, at the present, of more importance than any other point in connection with inlay work. I may also say that of the hundreds of porcelain inlays I have inserted, I have yet to see the first case of decay recurring at the margin of a cavity so filled.

There are many dentists now much interested, who, filled with newborn enthusiasm, will take up this work only to discover that their stock of patience is unequal to the task of surmounting the many minor difficulties that will be met in the practice of this art; however, if firm and determined to succeed in spite of a few failures which they are almost sure to have in the manipulation of the work, those who persist will soon come to feel with the writer that they would be unwilling in future, to practice dentistry without being prepared to insert a porcelain inlay whenever its use is indicated. Very truly yours, B. C. CONNELL,

St. Paul, Minn.

(If the cavity which receives the porcelain inlay is made of sufficient depth, so that the inlay itself would be thick enough to be opaque, it would be impossible for the cement to alter the color of the inlay. The worst result of using cement of bad color might be a discoloration around the margin, which, of course, would be objectionable, since it would indicate the edges of the filling. This may be obviated by beveling the margins of the cavity before making the matrix, and then by cutting a small groove near the margins before setting the inlay.

The cement should be thin enough so that by tapping the inlay to place, it will escape, allowing the inlay to come in close contact with the tooth substance. The profession, however, will be pleased to learn that the Consolidated are now offering a cement in four different colors, which will enable the artistic inlay worker to mix his cement to any shade desired so that he may accurately match the color of the inlay.—Editor.)





American Dental Society of Europe.

Upon motion, the following report of the committee appointed by the American Dental Society of Europe in London, August, 1898, was carried unanimously:

Whereas, a special executive session of the American Dental Society of Europe has been called at Brussels, April 1, 1899, for the purpose of considering what further action shall be taken towards improving the standing of the graduates from American Dental Colleges practicing in Europe and to receive and act upon the report of the committee appointed in London at the last annual meeting.

Whereas, a majority of said committee and a large number of the active members of the society being present from all parts of Europe, thereby showing their great interest in the subject under consideration,

Resolved, That the American Dental Society of Europe views with pleasure and approval the action of the National Association of Dental Faculties, U. S. A., in appointing a "Foreign Relations Committee," and hopes that this committee will be indefinitely continued, and empowered to take such action as shall appear to its members to be for the best interests of the profession.

Resolved, That the society expresses its thanks to the National Association of Dental Faculties, for its resolution and action in accepting the report of its "Foreign Relations Committee," and continuing it at Omaha, August, 1898, and creating advisory boards in all European countries, with the view that the certificates of foreign students proposing to enter American Dental Colleges, be submitted to the advisory boards of the respective countries of which they are citizens or residents.

Resolved, That it is the opinion of this society, that foreign students should possess such a knowledge of the English language as will enable

them to thoroughly comprehend the lectures and teachings which they will be called upon to pass examinations in, and that no foreign student should be allowed to pass any examination through the medium of an interpreter.

Resolved, That the American Dental Society of Europe heartily approves of the wisdom of requiring a preliminary examination of students from European countries, or would suggest as preferable that it be required of each foreign student that he present official certificates of having passed the preliminary requirements for matriculation as a dental student in his own country, and that these certificates be indorsed by the advisory board of said country, and that they also be subject to the rules of the National Association of Dental Faculties.

Resolved, That this society approves of the resolution of the "Foreign Relations Committee," of the National Association of Dental Faculties, to appoint advisory boards consisting of "not more than three members," and it is hoped, for the accomplishment of the best results, that the number of members on each board be raised to three at the earliest practical moment, and this society is unanimously and strongly of the opinion, that three are necessary to constitute an influential board of this nature; and that, where practicable, at least one member should be a native of the country.

Resolved, That the American Dental Society of Europe tender a sincere vote of thanks to the National Association of Dental Faculties, and to the "Foreign Relations Committee," and especially to their energetic chairman, Dr. W. C. Barrett, for the active and hearty manner in which they have met the appeals of their confreres in Europe, who for so long have urged the importance of the consideration this subject is now receiving at their hands.

Resolved, That a committee upon dental education be a permanent committee of the society, and that said committee consist of all the members of the society, who are members of the advisory board of the "Forcign Relations Committee" of the National Association of Dental Faculties.

(Signed)

L. C. BRYAN, Chairman.

W. E. ROYCE.

W. MITCHELL.

Foreign Relations Committee of National Association of Dental Faculties.

Much injustice has been done to American Dental Schools by the circulation of unfounded rumors of irregular graduations from reputable colleges where no facts are given which will sustain them. It should be generally known that the Foreign Relations committee of the National Association of Dental Faculties in America is ready and anxious to prosecute any college associated with it which in any way breaks its high and stringent published rules or any state laws.

Any complaints sent to Dr. James Truman, 4505 Chester avenue, Philadelphia, U. S. A., will be duly considered by his committee and reported to the association, and any college will be disciplined if found guilty.

I am also prepared to give careful attention to any such cases and report them.

Those illegal institutions which have in former years sold diplomas in Europe have been, and are being prosecuted, as fast as conclusive proof of such acts are placed in the hands of the proper authorities.

Dr. W. C. Barrett, of Buffalo, N. Y., has been especially active in hunting down these obscure swindlers who only advertise their wares in Europe.

The profession in Europe is earnestly requested to assist with any clear evidence it can produce or indicate where it can be found.

L. C. Bryan,

Chairman of the Association of Advisory Boards of the F. R. Com. of N. A. D. Faculties.

Basil, Switzerland, April 10, 1899.

Illinois State Board of Dental Examiners.

The next regular meeting of the Illinois State Board of Dental Examiners will be held on May 13, 1899, at the Chicago Business College, 67 Wabash avenue, Chicago, Ill. Those desiring to take the examination should notify the secretary before the date of the meeting.

J. H. Smyser, Sec'y, 70 State Street, Chicago, Ill.

Dental Society of the State of New York.

Chirty-First Annual Meeting. Fotel Cen Eyck, Albany, May 10 and 11, 1899.

Programme.

President's Annual Address,F. Le Grand Ames, Albany
Report of Correspondent, "Interstate Comity in the Enforcement of
Dental Laws,"
Discussion Opened by
Report of Committee on PracticeL. C. LeRoy, D. D. S.
Discussion Opened byJ. W. Beach, D. D. S.
"The Dentist's Posture,"
L. D. Sheppard, D. M. D.—D. D. S., Boston, Mass.
Discussion Opened by
"Microscopic Projection" (Illustrated), Wm. Hailes, Jr., M. D., Albany
Discussion Opened byA. M. Wright, M. D. S.
"Prosthetic Novelties," R. M. Sanger, D. D. S., East Orange, N. J.
Discussion Opened by
The Restoration to Usefulness of Badly Broken Down Molars and
Bicuspids, by Other Means than Gold Crowns A. Retter, D. D. S.
Discussion Opened by

Cri-Union Meeting.

The third tri-union meeting of the District of Columbia Dental Society, the Maryland State Dental Society and the Virginia State Dental Society, will convene in Washington, D. C., June 7, 8, and 9, in the Washington Dental College, 625 Massachusetts avenue, instead of in the Dental Department of Columbia University, as announced in April ITEMS.

Eminent practitioners from many States will be present to clinic and read papers.

Central Dental Association of Northern New Jersey.

The Educational Meeting of '99—Practical Bacteriology for the Dentist.

On Monday evening, May 15, by special invitation, Samuel A. Hopkins, M.D., D.M.D., of Boston, Mass., will read a paper entitled, "Practical Bacteriology," and members of the dental profession are cordially invited to be present.

The meeting will occur at 8:15 p. m., at Davis's Parlors, 943 Broad street, Newark, N. J. Previous to the meeting the usual banquet will be served, commencing at 6:15 p. m. Those desiring a cover reserved for them (one dollar per plate) will notify Dr. Charles A. Meeker, 29 Fulton street, by noon of May 13, with enclosure.

Trains on Central R. R., foot of Liberty street, New York, land within three blocks of (943 Broad street) the place of meeting, leave New York 4:20, 4:53, 5:10, 5:23.

Mark the date in your appointment book.

Vermont State Dental Society.

At the 23d annual meeting of the Vermont State Dental Society held at Burlington, Vt., March 15-17, 1899, the following officers were elected:

President, Dr. K. L. Cleaves, Montpelier; first vice-president, Dr. Henry Turrill, Rutland; second vice-president, Dr. C. W. Steele, Barre; recording secretary, Dr. Thomas Mound, Rutland; corresponding secretary, Dr. Grace L. Bosworth, Rutland; treasurer, Dr. W. H. Munsell, Wells River; State prosecutor, Dr. G. W. Hoffman, White River Junction.

Executive Committee-Dr. J. E. Taggart, Burlington.

Dr. H. W. Northrop, New York, N. Y.; Dr. A. J. Sawyer, Manchester, N. H.; and Dr. F. B. Smith, Stowe, Vt., were made honorary members.

Next meeting to be held at St. Johnsbury, Vt., the third Wednesday in March, 1900. T. Mound, Sec'y.

Michigan Dental Association.

The next annual meeting of the Michigan Dental Association will be held in the parlors of Hotel Harrington, city of Port Huron, Mich., July 11, 12, and 13, 1899.

A cordial invitation is extended to all members of the profession.

M. B. Dennis, Sec'y, Port Huron, Mich.

Michigan State Board of Examiners in Dentistry.

The next meeting (which will be the first session of the new board for this year) of the Michigan State Board of Examiners in Dentistry, to be held for the examination of applicants for permits to practice dentistry in this State will be held in the city of Port Huron, Tuesday, May 9, at 9 a. m., in the city council chambers.

Applicants for examination must furnish materials, instruments, (including dental engine) and gold for putting in one or more fillings, as the board may require.

Ten questions will be asked upon the regular subjects that constitute practical and theoretical dental education.

All Temporary Licenses Expire upon above date and Cannot be Renewed.

You are requested to send to the undersigned at Battle Creek, without delay, the name and address of every person you may know who is practicing dentistry in the State of Michigan, who is not registered.

H. T. HARVEY, D.D.S., Sec'y.

South Dakota State Dental Society.

The 17th annual meeting of the South Dakota State Dental Society will be held in Yankton, beginning Wednesday, June 7, and continuing three days.

C. L. Blunt, Sec'y,

Yankton, S. D.

Kentucky State Dental Association.

The 29th annual meeting of the Kentucky State Dental Association will be held at Mammoth Cave, Ky., May 16, 17 and 18, 1899.

A cordial invitation is extended to all members of the profession to be present.

For information, address

J. H. Baldwin, Sec'y, 302 West Broadway, Louisville, Ky.

North Carolina State Dental Society.

The next annual meeting of the North Carolina State Dental Society will be held in Raleigh, N. C., May 3, 4, and 5, 1899.

The meeting promises to be of more than usual interest.

A cordial welcome will be given all visiting dentists.

Reduced railroad and hotel rates.

J. S. Spurgeon, D.D.S., Sec'y, Hillsboro, N. C.

Che Nebraska State Dental Society.

The Nebraska State Dental Society will hold its 22d annual meeting at York, Neb., May 16-19.

B. F. Fisher, Cor. Sec.,

Omaha, Neb.

horthern Ohio Dental Association.

The fortieth annual meeting of the Northern Ohio Dental Association will be held at Cleveland (Colonial Hotel), May 16, 17 and 18, 1899, beginning at 10 o'clock a. m., sharp, Tuesday, May 16.

The new Colonial Hotel is especially fine in all its appointments. The proprietors, Messrs. McCreary & Furst, have made the following rates for this meeting: One in a room, without bath, \$3.00 per day; two in a room, without bath, \$2.50 per day. Fifty cents a day extra for room with bath.

Che Cexas Dental Association.

The nineteenth annual meeting of the Texas Dental Association will be held at Waco, Texas, the 16th, 17th and 18th of May next.

By the co-operation of the Texas State Pharmaceutical Association, which meets at the same time and place, we have secured the following reduced trip rates:

From points 75 miles and under, one and one-third fares; points 75 to 100 miles, \$3.00; points over 100 miles, half-fare.

The profession cordially invited.

M. S. MERCHANT, Pres., Giddings, Texas.

J. G. Fife, Sec., Dallas, Texas.

Che Dental Commissioners of Connecticut.

The Dental Commissioners of Connecticut will meet in the Supreme Court rooms at the Capitol in Hartford, Monday, May 15, 1899, at 10 o'clock, to examine candidates for license and attend to all matters proper to come before them. Persons desiring to practice in this State must apply to the recorder for proper blanks, which they will fill out and return to him before the day of examination.

George L. Parmele,

Dental Commissioner and Recorder, Hartford, Conn.

